BHUGOLA VARNANAM

by Saint
SRI VADIRAJA

Introduction, translation, commentary and illustrations

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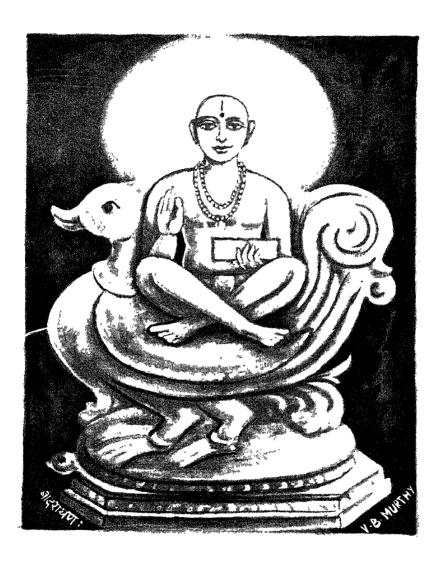
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DEDICATED TO

Acharya Sri MADHVA



Who, in all his three manifestations as Hanuma, Bhima and Madhva upheld the glory of Lord Sri Hari

This our humble tribute on the occasion of the celebration of his 750th Jayantı (1988-1989)



R. Badarınarayan, Ex-Edn Minister & M. P., Sri Visweshalittha Swamiji Sri Pejawar Mutt; Sri Vijnananidhi Tirtha Swamiji of Sri Sripadaraja mutt, Prof : S. K. Ramachandra Rao Sri V. Badarayana murthy

H. H. Sri Vishwesha Tirtha Swamiji,
Sri Pejavar Adhokshaja Mutt

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BLESSINGS

Bhakti means knowing God and loving Him intensely. By knowing how God has created this wonderful world we get to appreciate God's greatness much more and our love for Him increases. Therefore it is necessary for us to become well acquainted with the vast universe that God has created.

Material science enlightens us with the knowledge of Nature, Geography and Astronomy; and it also tells us about the vastness of the universe and the marvellous forces hidden in it. Thereby we become aware of God's unlimited powers. Our sages and seers have not only surveyed the universe by their mystic powers, but they have also comprehended and discussed the unseen features of the world. If we look into our ancient books, it will be clear that our writers had become familiar long long ago with the secrets of nature discovered by modern scientists. We may see that our ancient astronomers had spoken about the gravitational force in their own way even before Newton discovered it. Our sages had seen many things which are beyond the scope of modern scientific instruments.

At present, there appears to be a great gulf between what our ancient texts declare and what the modern discoverers think about the details of Geography. But, if the eastern pandits and the western class of scientits come together to hold critical discussions, it will held the world to find new light and to form a decisively correct picture of the universe. And it may also help us to understand the true import of our ancient texts. Generally, the apparent meanings of puranic texts are not the true meanings. Sri Madhwacharya has indicated that there are hundreds of ways in understanding the meanings of the puranas and, without knowing them, one cannot get at the heart of puranas. Therefore, it is not right to criticise the puranas as unscientific without making a proper study of puranic texts. As there are many knotty points in the puranas, hard to resolve, there are inconsistances in modern science too. Hence, the riddles may be solved only when scientists and pandit philosophers sit together and hold discussions.

Sri V Badarayana Murthy has made a deep study in this respect and has dealt with the ancient texts on scientific lines. He has attempted to meet the modern questioners with satisfactory answers. We wish that those who seek knowledge will give him all encouragement to pursue his efforts.

On the basis of facts culled from Srimad Bhagavatam and other relative texts, Sri V. Badarayana Murthy has rendered into English Saint Sri Vadirajaswamy's Bhugola Varnanam. We are glad to welcome this work which will be quite useful to those who are eager to get a true picture of the universe. We pray Sri Krishna to bless Sri V. Badarayana Murthy to serve Him furthur by holding the torch of knowledge.

We are pleased to offer compliments to the Akhila Bharata Madhwa Maha Mandali, Madras branch, for taking up the publication of this work.

(Sd.) Srı Vishwesha Tirtha Swamiji.

Camp: Madrapuri (Madras)

13th day of the bright half of Bhadrapada Month

13-9-1989

இ இ ವಿಶ್ವೇಶತೀರ್ಥ ಸ್ವಾಮೀಜಿ ತೀ ಪೇಜಾವರ ಅಭೋಕ್ಷಜ ಮಠ ಜಗದ್ಗುರು ಮಧ್ವಾಚಾರ್ಯ ಸಂಸ್ಕಾನ ಉಡುಪಿ – 576101, ಕರ್ನಾಟಕ

ಫೋನ್: 20498

ಭಗವಂತನ ಮಹಾಮಹಿಮೆಯನ್ನು ತಿಳಿದುಕೊಂಡು ಅವನಲ್ಲಿ ಮಾಡುವ ಅತಿಶಯ ಪ್ರೇಮವೇ ಭಕ್ತಿಯಾಗಿದೆ. ಭಗವಂತನ ಜಗತ್ ಸೃಷ್ಟಿಯೇ ಮೊದಲಾದ ಅದ್ಭುತ ವ್ಯಾಪಾರವನ್ನೂ ತಿಳಿದಾಗ ಅವನ ವಿಶೇಷ ಮಹಿಮೆಯ ಪರಿಚಯವಾಗಿ ನಮಗೆ ಅವನಲ್ಲಿ ಅತಿಶಯ ಭಕ್ತಿಯು ಉಂಟಾಗುವುದು. ಅದಕ್ಕಾಗಿ ಪರಮಾತ್ಮನು ಸೃಷ್ಟಿಸಿದ ಈ ವಿಶಾಲ ವಿಶ್ವದ ಪರಿಚಯವೂ ನಮಗೆ ಅವಶ್ಯವಾಗಿದೆ. ಭೌತಿಕ ವಿಜ್ಞಾ ನವು ಪ್ರಕೃತಿ, ಭೂಗೋಲ, ೩ಗೋಳಗಳ ವಿವರಣೆಯ ಜೊತೆಗೆ ಈ ವಿಶ್ವದ ವಿಸ್ತಾರ ಮತ್ತು ಪ್ರಕೃತಿಯಲ್ಲಿ ಅಡಗಿರುವ ವಿಚಿತ್ರ ಶಕ್ತಿಗಳ ಪರಿಚಯವನ್ನು ಮಾಡಿಸಿ ಭಗವಂತನ ಅನಂತ ಶಕ್ತಿಯ ವರ್ಶನವನ್ನು ನಮಗೆ ನೀಡುತ್ತವೆ. ನಮ್ಮ ಋಷಿ ಮುನಿಗಳು ತಮ್ಮ ದಿವ್ಯ ದೃಷ್ಟಿಯಿಂದ ವಿಶ್ವವನ್ನು ನಿರೀಕ್ಷಿಸಿ ನಮ್ಮ ಕಣ್ಣಿಗೆ ಅಗೋಚರವಾದ ಪ್ರಪಂಚವನ್ನೂ ವಿವೇಚಿಸಿದ್ದಾರ. ನಮ್ಮ ಅನೇಕ ಪ್ರಾಚೀನ ಗ್ರಂಥಗಳನ್ನು ಅವಲೋಕಿಸಿದಾಗ ಆಧುನಿಕ ಬೌತಿಕ ವಿಜ್ಞಾನಿಗಳು ಕಂಡು ಹಿಡಿದ ಪ್ರಕೃತಿ ರಹಸ್ಯೆಗಳನ್ನು ಅದಕ್ಕಿಂತ ಎಷ್ಟೋ ವರ್ಷಗಳ ಮೊದಲೇ ನಮ್ಮ ಗ್ರಂಥಕಾರರು ಕಂಡಿದ್ದಾ ರೆಂಬುದು ಸ್ಪಷ್ಟವಾಗುವುದು. ನ್ಯೂಟನ್ನನು ಹೇಳಿದ ಆಕರ್ಷಣ ಶಕ್ತ್ರಿಯ ವಿಷಯವು ತಮ್ಮದೇ ಆದ ರೀತಿಯಲ್ಲಿ ಪ್ರಾಚೀನ ಜ್ಯೋತಿಸ್ಯದಲ್ಲಿ ಉಲ್ಲೇಖವಾಗಿರುವುದನ್ನೂ ನೋಡಬಹುದು. ವಿಜ್ಞಾನಿಗಳ ಉಪಕರಣ ಗಳಿಗೂ ನಿಲುಕದ ಅನೇಕ ಸಂಗತಿಗಳನ್ನು ನಮ್ಮ ಋಷಿಗಳು ಅತೀಂದ್ರಿಯ ದೃಷ್ಟಿ ಯಿಂದ ನೋಡಿದ್ದರು ಇಂದು ಭೂಗೋಲದ ವಿಷಯದಲ್ಲಿ ಆಧುನಿಕ ಸಂಶೋಧಕ ರಿಗೂ ನಮ್ಮ ಪ್ರಾಚೀನ ಗ್ರಂಥಗಳಿಗೂ ತುಂಬಾ ವಿರೋಧಗಳು ಕಂಡು ಬರುತ್ತವೆ. ಆದರೆ ಆಧುನಕ, ಪೌರಸ್ತ್ರ ವಿಜ್ಞಾನಿಗಳಿಬ್ಬರೂ ಒಂಬೆಡೆ ಸೇರಿ ಚರ್ಚೆ ವಿಮರ್ಶೆ ಗಳನ್ನು ನಡೆಸಿದರೆ ಈ ವಿಷಯದಲ್ಲಿ ಜಗತ್ತಿಗೆ ಹೊಸಬೆಳಕು ದೊರೆತು ವಿಶ್ವದ ಬಗ್ಗೆ ಸರಿಯಾದ ನಿರ್ಣಯವನ್ನು ಪಡೆಯಲು ಅನುಕೂಲವಾಗಬಹುದು. ನಮ್ಮ ಪ್ರಾಚೀನ ಗ್ರಂಥಗಳ ನಿಜವಾದ ಅರ್ಥವನ್ನು ತಿಳಿಯಲು ನಮಗೆ ಇದರಿಂದ ಸಹಾಯವಾಗ ಬಹುದು. ಪುರಾಣಗಳಿಂದ ಅಪಾತತಃ ತೋರುವ ಅರ್ಥವು ಅದರ ನಿಜವಾದ ಅರ್ಥ

ವಾಗಿರುವುದಿಲ್ಲ ಪುರಾಣಗಳ ಸರಿಯಾದ ಅರ್ಥವನ್ನು ತಿಳಿಯಲು ನೂರಾರು ಪ್ರಕಾರ ಗಳು ಇವೆ ಎಂದೂ, ಅವುಗಳನ್ನು ತಿಳಿಯವೆ ಪುರಾಣಗಳ ನಿಜಾರ್ಥವು ಗೊತ್ತಾ ಗಲಾರ ದೆಂದೂ ಶ್ರೀ ಮದ್ವಾಚಾರ್ಯರು ನಿರೂಪಿಸಿದ್ದಾರೆ. ಆದುದರಿಂದ ಪುರಾಣಗಳನ್ನು ಸರಿಯಾಗಿ ವರಿಶೀಲಿಸದೆ ಅವುಗಳಿಂದ ತೋರುವ ವಿಷಯಗಳನ್ನು ಅವೈಜ್ಞಾನಿಕ ವೆಂದು ಹೇಳಬಾರದು. ಅದರಂತೆ ಆಧುನಿಕ ವಿಜ್ಞಾನದಲ್ಲೂ ಅನೇಕ ಅಸಂಭದ್ದತೆ ಗಳೂ, ಬಿಡಿಸಲಾರದ ಕಗ್ಗಂಟುಗಳೂ ಇವೆ. ಆದುದರಿಂದ ಭೌತಿಕ ವಿಜ್ಞಾನಿಗಳೂ, ಅಧ್ಯಾತ್ಮವಾದಿಗಳೂ ಸೇರಿ ಚರ್ಚಿಸಿದಾಗಲೇ ಈ ಎಲ್ಲಾ ಸಮಸ್ಯೆಗಳನ್ನು ಪರಿಹರಿಸಿ ಕೊಳ್ಳಬಹುದು. ಶ್ರೀ ಬಾದರಾಯಣಾಮೂರ್ತಿಗಳು ಈ ದಿನೆಯಲ್ಲಿ ತುಂಬಾ ಅಧ್ಯಯನ ನಡೆಸಿ ಪ್ರಾಚೀನ ಭೌಗೋಳಿಕ ಗ್ರಂಥಗಳನ್ನು ವೈಜ್ಞಾನಿಕವಾಗಿ ವಿವೇಚಿಸಿದ್ದಾರೆ. ಆಧುನಿಕ ಆಕ್ಷೇಪಣೆಗಳಿಗೆ ಸಮರ್ಥವಾಗಿ ಉತ್ತರಿಸುವ ಪ್ರಯತ್ನ ನಡೆಸಿದ್ದಾರೆ. ಜಿಜ್ಞಾನುಗಳು ಅವರಿಗೆ ವಿಶೇಷವಾದ ಉತ್ತರಿಸುವ ಪ್ರಯತ್ನ ನಡೆಸಿದ್ದಾರೆ. ಜಿಜ್ಞಾನುಗಳು ಅವರಿಗೆ ವಿಶೇಷವಾದ ಉತ್ತರಿಸುವ ನೀಡಬೇಕಾಗಿ ಬಯಸಿದ್ದೇವೆ.

ಶೀ ಬಾದರಾಯಣಮೂರ್ತಿಗಳು ಭಾಗವತ ಮುಂತಾದ ಗ್ರಂಥಗಳ ಆಧಾರದಲ್ಲಿ ಶ್ರೀ ವಾದಿರಾಜ ಗುರುವರ್ಯರು ರಚಿಸಿದ ಭೂಗೋಲವರ್ಣನೆ ಗ್ರಂಥದ ಅನುವಾದವನ್ನು ರಚಿಸಿದ್ದಾರೆ. ಜಿಜ್ಜ್ಲಾಸುಗಳಿಗೆ ಉಪಯುಕ್ತವಾದ ಈ ಕೃತಿಯನ್ನು ಸ್ವಾಗತಿಸುತ್ತಿದ್ದೇವೆ. ಇದೇ ರೀತಿಯಲ್ಲಿ ಶ್ರೀ ಬಾದರಾಯಣಮೂರ್ತಿಯವರಿಂದ ವಿಶೇಷವಾದ ಜ್ಞಾನ ಸೇವೆಯನ್ನು ಶ್ರೀ ಕೃಷ್ಣನು ಮಾಡಿಸಲೆಂದು ಆಶಿಸುವವು. ಇದನ್ನು ಪ್ರಕಾಶನಗೊಳಿಸುತ್ತಿರುವ ಮದರಾಸಿನ ಅಖಿಲ ಭಾರತ ಮಾಧ್ಯ ಮಹಾಮಂಡಳಿ ಶಾಖೆಯನ್ನು ನಾವು ಅಭಿನಂದಿಸುತ್ತೇವೆ.

Camp : ವುದ್ರಪುರಿ ಭಾದ್ರಸದ ಶುಕ್ಲ ತ್ರಯೋದಶೀ

13 - 9 - 1989

(ಸಹಿ) ಶ್ರೀ ವಿಶ್ವೇಶತೀರ್ಥರು

SRI SRIPADARAJA MUTT, No 58, Raghavendra Colony, Chamarajapet, Bangalore-18

Date 24-9-1989

This blessing is communicated to Vedamurti Badarayanacharya in the name of Sriman Narayana.

We have gone through the script of 'Bhugola Varnanam', a product of much Painstaking. Although it was not possible to go through it in greater detail, we are pleased to say that the style and the analytical Presentation of facts are sure to help the general readers to get a clear bird's eye view of this universe created by It has been possible for Sri Badarayanamurthy to present the most sublime facts in quite a simple manner since he has made a deep study of many scriptural texts and has also gone through several books on modern science with a critical outlook. Another noteworthy feature is that he has pointed out how the views of the followers of other religions- especially the Christians and the Muslims, agree with the Madhva concept of Cosmology as dealt with specially by Sri Vadiraja swamy, who is acclaimed as 'Bhavi Samıra'—the would - be Vayudeva. Thus the author of this text has rendered useful service to humanity.

The efforts of modern scientists to unravel the secrets of nature have their own limitations and often lead to differing opinions. Also, the great efforts put

forth by scientists and modern philosophers to seek happiness seem to be somewhat ridiculous and not fruitful. Sri Badarayana murthy has rightly pointed out this fact. Since scientific achievements and modern philosophical approaches are mostly opposed to intrinsic truth, it would be profitable for every one to make an honest effort to understand Vedic truths visualised by the seers; truths which cannot be discovered by mechanical aids. Sri Badarayana murthy's attempt to make Sri Vadiraja swamy's Bhugola Varnanam palatable to scientists too is quite laudable.

If the well – intentioned readers sincerely go through the book and understand it, the author's efforts will be richly rewarded. With this conviction we offer our Prayer to the Lord of our adoration – Sri Sri Gopinatha, not different from Sri Sri Hayavadana and Sri Sri Rangavittala, to bless the author with a long-lease of useful life.

Thus we conclude with the awareness of Sriman Narayana.

(Sd) Srı Vijnananidhi tirtharu.

We offer respectful salutations to Sri Sri Vıshwesha tirtha swamiji of Sri Pejawar Mutt, to Sri Srı Vijnananidhi tirtha swamiji of Sri Sripadaraja Mutt for their blessings, and to Prof: K. T. Pandurangi, who has furnished a critical preface for this publication.

A. B. M. M. (Madras Branch)

॥ ಶ್ರೀ ಗೋಪೀನಾಥೋ ವಿಜಯತೇ॥

ಶ್ರೀ ಶ್ರೀಪಾದರಾಜ ಮಠೆ 58, ರಾಘವೇಂದ್ರ ಕಾಲೋನಿ, ಚಾಮರಾಜಪೇಟ್ನೆ ಬೆಂಗಳೂರು – 18.

ತಾರೀಖು 24-9-1989

ವೇದಮೂರ್ತಿ ಬಾದರಾಯಣಾಚಾರ್ಯರಿಗೆ ನಾರಾಯಣ ಸ್ಮರಣಪೂರ್ವಕ ಬರೆದು ಕಳುಹಿಸಿದ ನಿರೂಪ.

ಶ್ರೀ ಬಾದರಾಯಣಮೂರ್ತಿಯವರು ಬಹಳಷ್ಟು ಶ್ರವುಪಟ್ಟು ಬರೆದಿರುವ ಭೂಗೋಳ ವರ್ಣನೆ ಎಂಬ ಗ್ರಂಥದ ಕರಡು ಪುಸ್ತಕದ ಕೆಲವು ವಿಷಯಗಳನ್ನು ನಾವು ಓದಿರುತ್ತೇವೆ. ಈ ಕರಡು ಪ್ರತಿಯ ಎಲ್ಲಾ ವಿಚಾರವನ್ನೂ ಓದಿಲ್ಲವಾದರೂ, ಈ ಪುಸ್ತಕದ ಶೈಲಿ ಮತ್ತು ವಿಷಯಗಳ ವಿಶ್ಲೇಷಣೆಗಳು ಸಾಮಾನ್ಯ ಜನರಿಗೂ ಪರಮಾತ್ಮನಿಂದ ಸೃಷ್ಟವಾದ ಈ ಜಗತ್ತಿನ ಒಂದು ವಿಹಂಗಮ ನೋಟದ ಅಭಿ ಪ್ರಾಯವು ಬರಲು ಸಾಧ್ಯವೆನಿಸುವಂತೆ ಇವೆ ಎನ್ನಲು ಅಡ್ಡಿಯಿಲ್ಲ. ಈ ಗಹನ ವಿಷಯವನ್ನು ಇಷ್ಟು ಸರಳ ರೀತಿಯಲ್ಲಿ ಬರಯಲು ಬಾದರಾಯಣಮೂರ್ತಿಯವರು ಅನೇಕ ಶಾಸ್ತ್ರಗಂಥಗಳನ್ನೂ ಹಾಗೂ ವಿಜ್ಞಾನಿಗಳು ಈ ವಿಚಾರವಾಗಿ ಬರೆದಿರುವ ಪುಸ್ತಕಗಳಲ್ಲಿನ ಅವರ ಅಭಿಪ್ರಾಯಗಳನ್ನೂ ಸೂಕ್ಷ್ಮ ದೃಷ್ಟಿಯಿಂದ ಪರಿಶೀಲಿಸಿರು ವುದಲ್ಲದೆ ಅನ್ಯಮತೀಯರು ಅಂದರೆ ಕ್ರೈಸ್ತಮತದವರು ಮತ್ತು ಇಸ್ಲಾಂ-ಮತ ದವರುಗಳೂ ಈ ಜಗತ್ ಸೃಷ್ಟಿಯ ಬಗ್ಗೆ ವ್ಯಕ್ತಪಡಿಸಿರುವ ಅಭಿಪ್ರಾಯಗಳು ಎಷ್ಟರ ಮಟ್ಟೆಗೆ ಮಧ್ವಶಾಸ್ತ್ರಕ್ಕೆ, ವಿಶೇಷವಾಗಿ ಭಾವೀ ಸಮೀರರೆಂದು ಪ್ರಸಿದ್ದರಾದ ಶ್ರೀ ಶ್ರೀ ವಾದಿರಾಜಸ್ವಾಮಿಗಳವರ ಭೂಗೋಳ ವರ್ಣನೆಗೆ ಸರಿಹೊಂದುತ್ತವೆ. ಎಂಬ ಅಂಶವನ್ನು ಯೋಗ್ಯ ರೀತಿಯಲ್ಲಿ ತಿಳಿಸಿ, ವಿಶೇಷ ಉಪಕಾರ ಮಾಡಿರುತ್ತಾರೆ.

ಮುಖ್ಯವಾಗಿ, ವಿಜ್ಞಾನಿಗಳು ಪ್ರಕೃತಿಯ ಸ್ವರೂಪವನ್ನು ತಿಳಿಯಲು ಮಾಡಿರುವ ಏನೆಲ್ಲ ಸಾಧನೆಗಳೂ ಸಹ ಒಂದು ಅವಧಿಯನ್ನು ಹೊಂದಿರುವು ದಾಗಿಯೂ ತಿಳಿಸಿರುವುದಲ್ಲದೆ, ಈ ವಿಜ್ಞಾನಿಗಳು ಹಾಗೂ ಈಗಿನ ತತ್ವಜ್ಞರುಗಳು ಕೇವಲ ಸುಖಕ್ಕಾಗಿ ಮಾಡುತ್ತಿರುವ ಪ್ರಯತ್ನಗಳು ಹಾಸ್ಯಾಸ್ಪದವೇ ಹೊರತು ಫಲಕಾರಿಯಲ್ಲ ಎಂಬ ಅಭಿಪ್ರಾಯವನ್ನು ವ್ಯಕ್ತಪಡಿಸಿರುವುದು ಯುಕ್ತವಾಗಿರುತ್ತದೆ.

ನೇಲೆ ತಿಳಿಸಿದಂತೆ, ವೈಜ್ಞಾನಿಕ ಸಾಧನೆಗಳೂ ವೈದಿಕ ತತ್ವದಿಂದ ಭಿನ್ನ ರಾದ ತತ್ವಜ್ಞ ರ ತತ್ವಗಳೂ ನೈಜತತ್ವ ಸ್ವರೂಪದಿಂದ ಭಿನ್ನ ವಾಗಿರುವ ಕಾರಣ, ಅಪೌರುಷೇಯಗಳಾದ ವೇದಗಳ ಅರ್ಥವನ್ನು ಸರಿಯಾಗಿ ತಿಳಿದು, ತಮ್ಮ ಜ್ಞಾನ ಚಕ್ಷುಸ್ಸಿನಿಂದ ಯಂತ್ರೋಪಕರಣಗಳಿಂದಲೇ ತಿಳಿಯಲಸಾಧ್ಯವಾದ ತತ್ವರಹಸ್ಯ ಗಳನ್ನು ತಿಳಿಸಿಕೊಟ್ಟರುವ ಶ್ರೀ ಶ್ರೀ ವಾದಿರಾಜರ ಭೂಗೋಳವರ್ಣನೆಯನ್ನು ವಿಜ್ಞಾನಿಗಳೂ ಒಪ್ಪುವ ರೀತಿಯಲ್ಲಿ ನಿರೂಪಿಸಿರುವ ಈ ಪುಸ್ತಕವನ್ನು ಸಜ್ಜನರು ಪ್ರಾಮಾಣಿಕವಾಗಿ ಓದಿ ಅರ್ಥೈಸಿಕೊಂಡಲ್ಲಿ ಈ ಗ್ರಂಥಕರ್ತರ ಶ್ರಮ ಸಾರ್ಥಕ ವಾಗುವುದೆಂದು ಭಾವಿಸಿ, ಗ್ರಂಥಕರ್ತರಿಗೆ ನಮ್ಮ ಆರಾಧ್ಯಮೂರ್ತಿ ಶ್ರೀ ಶ್ರೀ ಹಯವನದ ರಂಗವಿಠಲಾತ್ಮಕ ಶ್ರೀ ಶ್ರೀ ಗೋಪೀನಾಥ ದೇವರು ಪೂರ್ಣ ಸಾರ್ಥಕ ಆಯುಸ್ಸನ್ನು ಕೊಟ್ಟು ಕಾಪಾಡಲೆಂದು ಪ್ರಾರ್ಥಿಸುತ್ತಾ ಮಾಡುವ ನಾರಾಯಣ ಸ್ಮರಣೆಗಳು.

(ಸಹಿ) ಄೯ ಄೯ ವಿಜ್ಞಾನನಿಧಿ ತೀರ್ಥರು

ನಮ್ಮ ಈ ಪ್ರಕಟಣೆಗೆ ಮೆಚ್ಚಿ ಆಶೀರ್ವಚನವನ್ನು ನೀಡಿರುವ ಶ್ರೀ ಶ್ರೀ ಪೇಜಾವರ ಮಠಾಧೀಶರಾದ ಶ್ರೀ ವಿಶ್ವೇಶತೀರ್ಥ ಶ್ರೀಪಾದಂಗಳವರಿಗೂ, ಶ್ರೀ ಶ್ರೀಪಾದರಾಜ ಮಠಾಧೀಶರಾದ ಶ್ರೀ ವಿಜ್ಞಾನ ನಿಧಿತೀರ್ಥ ಶ್ರೀಪಾದಂಗಳವರಿಗೂ, ತಮ್ಮ ವಿಮರ್ಶಾತ್ಮಕವಾದ ಪೂರ್ವ ಪೀಠಿಕೆಯನ್ನು ದಯಪಾಲಿಸಿರುವ ಪ್ರೊ ॥ ಕೆ.ಟಿ. ಪಾಂಡುರಂಗಿಯವರಿಗೂ ಹೈತ್ಪೂರ್ವಕವಾಗಿ ನಮ್ಮ ನಮನಗಳನ್ನು ಸಲ್ಲಿಸಲು ಸಂತಸವುಕೃವರಾಗಿದ್ದೇವೆ.

ಅಖಿಲ ಭಾರತ ಮಾಧ್ವ ಮಹಾಮಂಡಲಿ (ಮದರಾಸು ಶಾಖೆ)

PREFACE

(by Prof: K.T. Pandurangi, former Professor of Sanskrit, Bangalore University; President, Mythic Society, Bangalore)

I had the pleasure of reading the English summary of Bhugola Varnanam of Sri Vadiraja tirtha, prepared by Sri V. Badarayana Murthy. He has also added a long introduction to this work which incorporates the gist of the papers presented at the seminar on cosmogony and cosmography organised by him in Bangalore during August 1987.

This volume has two purposes in view. 1. To make clear the conecpt and details of the Geography of the whole universe consisting of the fourteen lokas as described in Bhugola Varnanam by Sri Vadiraja tirtha to such readers who do not know Sanskrit. 2. To elucidate this concept and details in terms of modern knowledge on this subject.

It is natural that the two do not agree in all the details. One should not be in a hurry to reject either the traditional or the modern merely on this ground. Scientific enguiry knows no end. Modern science is still quite young and should have the ambrition to grow. Its experimental method is only one way of scientific enquiry. Our ancient seers probably had much superior methods of enquiry. They were able to cultivate ceratin mental faculties of man that could probe into the mysteries of the universe much deeper.

Sri Vadıraja tirtha, the author of Bhugola Varnanam, was one such great seer of mystic powers. His Bhugola Varnanam was the outcome of both his direct vision of the structure of the universe through his mystic power and also his deep study of puranas that give the details of the universe. Therefore, modern screntists should take it as a guide to continue their enquiry furthur Sri V. Badarayana Murthy has analysed the contents of this great work in a simple and clear manner. He has given modern equivalents of calculations of the locations of planets and distances, seas, worlds, etc., and this is very helpful to understand the ancient calculations.

The gist of the seminar papers included in the introduction throws useful light on different aspects of this problem It is heartening to note that many young scientists have handled the matter with an open mind and with convincing arguments. I appeal to senior scientists to overcome their prejudice that the Vedas and puranas contain unscientific and imaginary data and all this does not stand any scientific scrutiny. They must accept the fact that our ancient seers were more close to Nature and had different methods of enquiry other than the present day experimental method But their conclusions are still available in our ancient literature and we must try to find the clues to understand them. If we are not able to read tne script of certain ancient documents, we should not rush to the conclusion that these ancients had no language at all. Our branding of our ancient scientific thought as unscientific amounts to such an attitude

Sri V. Badarayana Murthy has done well in bringing this great work on world Geography to the notice of modern scholars. The pictures and charts included by him have added to the usefulness of this volume.

BHUGOLA VARNANAM

Education after independence has taught us only to laugh at our ancient wisdom. The material Science which gets lion's share under Education, has no answer to human problems, for it does not accept that a man has a soul to save.

Added is the bluff that is carried on vehemently that our earth has three motions. The first, it spins on its own axis. The second, it orbits round the sun. The third, it has precession. If we accept these motions for the earth, no life would be possible on this earth.

Our ancient Scriptures hold that the earth is stationary. Not only that; it is just one of the fourteen lokas created by the Lord Even though their truth is vouchsafed for us by the Lord, Himself, thanks to the doubts injected by Material Science, which is based on imperfect perception and logic based on such faulty perception, even scripturally oriented people feel timid to project the views given by Scriptures.

Shri V Badarayana Murthy has made a life-long study of both the views. No one is asking anyone to accept this view or that view. But there is sufficient scope for further scrutiny on received knowledge which is paraded before our children.

It is for the serious reader to consider the two views and arrive at his own conclusion. Saint Sri Vadıraja has given this work, so that the devotees of the Lord may see their way clearly.



Chaturmukha Brahma in the naval lotus of Sriman Narayana

BHUGOLA VARNANAM'

BY:

SAINT SRI VADIRAJA

INTRODUCTION

Acarya Sri Madhva classifies souls not only as belonging to three main types, good, bad and mediocre: but he also classifies them as belonging to several grades according to their innate abilities. This is in accordance with 'Prasthana thraya' - Brhma Sutras, Ten Major Upanisads and the Bhagavadgita, as also according to the several smritis and puranas. If only to inform the average readers who may not be familiar with Brahmasutras and the Upanişads, we may ask them to refer to the 16th chapter of BhagavadgIta where souls are clearly branded as belonging to the divine group and the demoniac group; and it is natural that there should be a middling group, neither fully divine, nor fully demoniac. The very name of the chapter is 'Daivasura sampad vibhaqa'.

Among souls of divine inclination, there are several grades such as the best of humans, human sovereigns, human gandharvas, divine gandharvas, divine sovereigns, Ganapati and his equals, Agni-the fire God Maharshis, Devarshis like Bhrqu and Narada, the Sun, the Moon, Kubera, Yama, Indra, Kama (wish-creating master), Sankara, Garuda and Sesa. This is in the ascending order-only a few details mentioned.

There is a class of souls, higher than Garuda and Seşa; they only are eligible to occupy the post of Caturmukha Brahma. (Female souls, the true partners of the male souls mentioned, are also having gradations). During every Brahma Kalpa-period of creation and sustenance, there will be two hundred such souls, the one who has completed his training during 199 previous Brahma Kalpas, now occupying the seat of Brahma. Next in the order of gradation, downward, are Vāyu, Lātavya, Gavya, Vaktavya, Jnātavya, and so on. (These details are found in Vāmana purāna).

Saint Sri Vādirāja is the 198th, 'Lātavya', in the upward scale of gradation. He is almost as good as the 199th, Vāyu, and during this, his period of probation, he engages himself in the activities of Brahma and Vāyu, of course, with their co-operation. The activities of these three souls are universal. There is nothing in this universe in which they are not engaged. They are everywhere and in every thing - living or non-living, doing their jobs for them.

Lord Sri Lakshminarayana, the Supreme Being, is their Master.

more likely to believe in autobiographies than in biographies penned by adorers. Saint Sri Vadiraja has given us his autobiography in his text 'Vrndavana Akhyanam', containing 22 chapters. wondrous part of it is that he was just known generally as a great saint and the greatest scholar of Madhva sastra during his time: but. sometime after he entered brndavan (Samadhi) having no tryst with death at the ripest age of 120, he entered the body of a born-dumb brahmin with his spiritual part, and dictated his autobiography such that people might believe his words. This is history of the period of the famous Krishnadevaraya of Vijayanagar. There monumental evidence for all this if one cares to inspect.

following are the salient facts in 'Brndavana Akhyanam' bearing relevence to Varnanam'. 'Bhugola In these days of topsyturvy knowledge of the vast universe put forward by the scientist folks, people not believe if it is said that Saint Sri Vadiraja had the ability to go anywhere in the fourteen worlds and that he was honoured by the Gods to whichever upper world he went and that he was fortunate enough to go to the Abode of Srīman Nārāyana in 'Sweta Dvīpa', where he was blessed by the fond embrace of the Supreme Lord.

These details go to show that his 'Bhugola Varnanam' is not just a concept formed by the study of puranas like Srimad Bhagavatam. He has given us first-hand knowledge of all the regions of the universe, which he visited and saw actually.

Knowledge of truth published by the sastras is tested with reference to visual perceplogic and the Vedic literature ('Pratyakṣa', 'Anumāna' and 'Āgama'). To these is added what is known as 'Apta Vakya'words spoken by reliable persons. Who else could be a greater 'Apta' or more reliable person than Saint Sri Vadiraja a saint of the highest order, the most profound scholar, and one who had full mastery over spiritual powers? For our reliance on 'Apta Vákya' I shall give an example which seems to be nearest to us. Some one asked Ten-singh, 'Have you seen the yeti? Do you believe that such a thing as that exists? Tensingh replied, "I have not seen the yeti. I do not generally believe what I have myself not seen or experienced. But, it seems, my father saw the yeti twice; and I cannot disbelieve his words". Such indeed is 'Apta Vakya', the word of a reliable person - one who is wellinformed, discerning and has no intention to cheat others. Therefore, Saint Sri Vādirāja's 'Bhūgola Varnanam is Apta Vākya' for us. It is not only reliable; it can stand the test of modern science by all counts.

At present, science and traditional knowledge seem to be at loggerheads. Therefore, I shall endevour to point out the limitations of scientific investigation and the authoritative declaration of the puranas and religious literature in general. While doing so, I shall freely draw upon the information provided by several scholars in their papers presented at the seminar on 'Cosmogony and cosmography' held in Bangalore during the year 1987.

The following are the salient points presented by myself in the back-ground paper, 'Beginning of beginning'.

There are two clear versions about the 'Beginning of beginning'- the creationist view and the evolutionist view. The creationists seem to be on firm ground although, at present, many of its votaries are unable to stand on their legs. On the other hand, many modern scientists are finding fault with Darwin's way of drawing conclusions.

An intelligent study of the scriptures goes to show that God created all things gradually, the physical features and the living beings.

Even according to historical survey it must be admitted that the Vedas are the earliest records of human thought. However, it is held Hindu tradition that the Vedas are only revelations, heard or visualised by sages and not the product of human thought. When the and the Bible are also said to be revelations, there must be truth in considering them as such. All the three have combined to deceive humanity. These revelations are also spoken of as the Word of God. Vedas are eternal and authorless; but gives expression to them. Veda means knowledge. It is God's knowledge. He is in 'Omkāra' and he is 'Omkāra swarūpa'. Then, is right to say that Vedas are not authorless?

Modern scientists, who bank upon the 'Big bang', theory of creation and evolutionism are really to be commended for their good guesses although they are ignorant about the true details. The puranas, among all the religious literatures, tell us how God goes on with the work of creation through divine agents by a series of 'big-bangs'-'Kshobhā' or 'Ālodana', over a long long period of

864,0000000x360x50+1050 crore human years, and how living beings were created in the order of the simplest to the most complex during a period of 1050 crore years. It is said that the divine agents were satisfied only after they had moddled the human frame with all its computarised mechanism and its intellectual and emotional abilities enabling man to know God and his ways and to worship Him.

Professor S.K.Ramchandra Rao, in his inaugural address delivered at the said seminar under the benign presidentship of Sri A.R.Badarinarayan, BA.BL., Ex-Education Minister of Karnataka and Ex. M.P., said that the birth of the universe was not an accident according to Indian scriptures. Further he said that the 'Big bang' theory does not have much use for the intuitive faculty of man, which finds its worthy place in the Vedas and other Hindu scriptures.

His Holiness Sri Viswesatirtha swāmīji of Pejāwar mutt, who blessed the seminar with his holy presence, supported prof.S.K.R. Rao's view saying that there was a systematic governing of the universe by a force outside it. He also said that much before Newton put forth his famous theory of gravitational pull, the Indian scriptures had spoken of it.

Prof.K.T.Pāndurangi, who delivered the veledictory address at the seminar under the worthy presidentship of Prof:K.T.Srīnivāsa Iyengar, said that the experimental method was not the only means to knowledge and that the scientists should come forward to understand Vedic truths. Intuition, inspiration and revelation are to be respected.

The tribute paid to Vedic literature by Sri T.V.Vedavyāsa, M.sc. Lecturer, St. Joseph's College, Bangalore, in his paper 'Science and the Vedas' is worth noting. Here it is -

"Science is defind as systemetised knowledge. In the modern sense it is knowledge gathered by means of human endevour and brought to the form of a dependable system. Naturally it must be incomplete and imperfect. But the Vedas provide us with systematic knowledge in ready-made form.

"THE features of the Kali age are out and out materialistic. Therefore it is hard for many to believe in the invisible worlds of which the Vedas speak. But this should be no hindrance to those who make honest efforts to know things as they are. The laboratory method, with its own limitations, is not the only means to gain knowledge. Clining to that method and rejecting all else is not wisdom at all.

"Some would call as fictitious whatever they cannot see or experiment upon. But historical facts cannot be rejected although they may not be matters of routine nature. Tansen, the court musician of Akbar, had such mastery over 'Dipak rag' that he could make the wick of an oil lamp catch fire and get lighted up. Acarya Sri Madhva could make seeds to sprout into seedlings in his hand by chanting the required Vedic hymn. But such persons are very rare to find. Nevertheless, they are historical personages.

"Let us not bother ourselves much about the authorship of the Vedas. If only we take look at the several sciences contained in the Vedas, we will be forced to admit that they are surely revelations and not the work cowherd Aryans. Vedic mathematics is the origin of not only the Arabic numerals the decimal system, but it is the source Algebra, Geometry, Trignometry and many more branches of mathematics. In the Atharva Veda we find the sources of many many sciences such as Áyurveda, Silpa Sastra, Sāstra, Loha Vidya, Jyoti's'sastra, Pāka 'sastra, Hatayoga, etc. The Samaveda is wellknown as the source of the musical science.

[&]quot;Musical science is highly rational. It would be astounding when it is observed that the seven primary sounds-sa, ri, ga, ma, pa, da,

ni, signify seven knowledges conveyed by the sun's rays and symbolised by the seven horses of seven colours. The Supreme Lord presides over the seven divisions of day and night with his seven forms-Aniruddha, Pradyumna, Samkarşana Vāsudeva, Nārāyana, Varāha and Narasimha.

Sri T.V. Vedavyasa concludes his paper saying, "Let us hope that scholars and doctorate-holders in every branch of modern knowledge will be humble enough to consult recognised pandits of the older order for clarification of doubts and for enlightenment."

Dr. A.R. Vasudeva murthy, D.Sc., of the Indian Institute of Science, Bangalore, delivered a lecture on 'Ancient Indian Chemistry' with the aid of slide projection. He stated that right up to the 18th century, India was looked to even by Imperial Rome as the most skilled of nations in such chemical industries as dying, tanning, soap-making, glass and cement. By the sixth century A.D., Indians were ahead of Europe in Industrial chemistry - Everyone knows about the chemical excellence of cast iron produced in Ancient India.

Thus, Dr. Vasudeva murthy has given glowing tribute to vedic Sciences.

Dr. Jayaprakash Narayan, M.B.B.S., M.D. (Ay), President, Karnataka Ayurvedic and Unani Board etc., Practioner's along with Dr. Nagesh, P.R., M.D. (Ay) - speaks of the science of Ayurveda revealed in the Atharavanaveda - "It is interesting to that 'Ayurveda, being mostly a material has adopted all the theories as envisaged by the Samkhya materialism School, which finds its parrallel in modern Darwinian theory. It is said that the Acarya of Caraka Samhita clarifies the need for the knowledge of similarity between the self and the universe to make known to the human being that the cause for all happiness or otherwise is himself/herself and none else."

Dr. M.P. Alexander, M.Sc., (Ag), Ph.D (Ohio, U.S.A) senior scientist and Head, Division of plant Genetic Resources, Indian Institute of Horticultural Research, Bangalore, delivered a lecture illustrated with slides to emphasis the creationist view by demonstrating with the help of pictures on the screen how God's creation is wonderful and beyond human reasoning. He showed and clearly explained the mystic symbols on Rudrāksha Omkār''Sivalinga', 'Trident', 'Snake' and the like.

In this connection, I wish to draw the attention of readers to look at the 'Nagalinga Puspa' when it blooms in early spring. One

can see, how, the pedestal of the flower exhibits the 'Sivalinga', with the thousand-headed serpant lifting its hoods above the 'Sivalinga'!

In spite of such proofs, why do people fail to give credit to scriptural details and hang on to the dubious present-day sciences?

Miss. Usha.K.Adya gives the answer in her paper, 'Role of Renaissance in the world'.

"By the beginning of the Middle Ages in European History, the Christian religion began to lose its hold on the common people and made way for the new thinkers who based their line of argument upon the ways of the early Greek thinkers. They began to question everything and, strangely enough, the Christian priests failed to provide satisfactory answers. Development of sciences in the 16th and the 17th centuries helped the new thinkers to proceed on materialistic lines, neglecting the religious views.

"British rule in India for nearly two centuries paved the way for the spread of European New Learning in our country. The teaching of modernised history gave a signal blow to Puranic lore. We go through religious duties and ceremonies without actually believing in their foundations. How can there be any

sincere belief when our historical sense treats Vedas and Puranas as Myths? Hence, our present need is to see to the 'Revival of Indian Learning and Culture' in its pristine form."

Sri V.L. Praveen, B.E. has pointed out that the fundamental error made by modern thinkers is the world-wide belief in evolutionism the cost of creationism. His remarks are worth our consideration. He says - "Charles Darwin, the main propounder of the theory of evolution, tells us that life first appeared in waters and developed simple aquatic creatures, which in course of time developed into terrestrial and aerial creatures. But fails to account for the appearance of life to begin with. His laws of natural selection and survival of the fittest form poor logic; and it is not at all scientific as no laboratory method can prove it. How and why people believe in such an 'ism' is ununderstandable. The western thinkers might have had reasons for such belief in the face of the so-called Biblical statements telling that the entire creation was the work of six days and that it just 6000 and odd years since creation began. Geological proof goes thoroughly against it.

The creationist view that we can find in Vedic literatures, on the other hand, presents a clear scientific account of facts.

"Therein we are told how primordial matter was transformed into grosser and grosser modes to form the nine outer envelopes of the universe (and it took half of Brahma's life period - 'Prathama Parārdha'. Then the grosser materials were created by chemical big bangs, known technically as 'Pancīkarana'.

 $^{\prime\prime}$ Life within the 'Brahmānda' started first in waters even as Darwin guessed. Lord Nārāyana entered the gross waters of the Brahmanda with all the souls to be brought into creation, and gave them gross bodies through the agency of Mahālakshmi, his spouse Mistress of Nature. Vedas bear testimony in this respect. MahaLakshmi says "Mama yonih apsu Vantassamudre". My creator is in waters and my field of activity is therein to begin with". Srimad Bhagavatam, Visnu rahasya and the other puranas clearly tell us how living creatures were developed over a long period by the divine agents of the Creator, the 'Beginning of beginning'. Seven stages of creation are clearly mentioned acquatic creatures, reptiles, animals of land, birds, mammals, higher mammals like the cow and the horse, and then, man".

Sri.V.L. Pravin makes out a case to show how the modern mind is viciated by total dependance on the Darwinian theory of evolution. Erich Van Daniken was surprised to find marvellous examples of human genius among the ruins of Maya Civilisation, America (for details, one may look into his very interesting book 'the Chariots of the Gods'). He does not actually mean true divine beings by the word 'Gods'. He only means some human beings from some other planet with better developed skills.

The fact is that this author would have formed a different opinion altogether if he had access to vedic literatures - especially details found in the Atharvana Veda and the Puranic accounts which tell about the skills with which Viswakarma (divine architect) and Mayāsura (architect of the demons) are endowed.

Sri G.B. Gururajachar, M.Sc., Lecturer National college, Gowribidanur, writing about 'Cosmogony and Cosmography as gleaned from Bhagavadgita' quotes relevent verses from the text to show the nature of the universe and the greatness of its creator. Here are a few verses -

"Vedanta krid veda videvacaham"

(I am the author of Vedanta and I know the meaning of the Vedas; non else).

This line of the verse clearly tells us that Sri Vyāsamaharsi is the same as Sri Kṛshna, 'Vedānta' being used here to mean the Brahmasūtras. Therefore, we have to agree with what Sri Vyāsamaharsi has said about Cosmogony and Cosmography in Srīmad Bhāgavatam and in the other Puranas.

"Aham krtsnasya jagatah prabhavah pralayah tatha"

(I am the creator of the entire universe and I am its consumer).

"Mayadhyaksena prakrtih suyate sa caracaram Hetunanena kaunteya jagad viparivartate"

(Under my supervising lordship, the mistress of nature gives birth to living creatures and material forms. The world undergoes changes on account of this).

"Tribhih gunamayaih bhavaih yebhih sarvam idam jagat mohitam nabhijanati mamebhyah param avyayam"

(The beings in this world are overpowered by ignorance caused by the three material modes. Hence, they do not know that I am different from and superior to all else and that I am changeless.)

"Avyaktam Vyaktim apannam manyante mam abuddhayah param bhavam ajananto mama avyayam anuttamam"

(Those who are unintelligent think that I assume material bodies. They do not know the excellence of my being, which is changeless and very very superior in every respect).

The two verses quoted above clearly show that the world is real and different from the changeless Brahman.

"Mayā tatam idam sarvam jagat avyakta mūrtinā Matsthāni sarva bhūtāni nacāham

teshvavasthitah"

(This universe is fully pervaded by my unseen personal presence. I am supporting all things, myself being supported by none).

The word 'different' is misconstrued by the supporters of monism. When it is said that material things and individual souls are different from the Supreme Being, they assume that they should be outside Brahman or that there should be holes in Brahman to locate them. The Verse quoted tells us how Brahman is inside and outside everything and every one without being contaminated. The word 'murti' tells us that He has His non-material forms. But we should note that each one His forms is in every other form in its fullness and that the different forms make one form, singly or in groups.

Stanzas 20, 21 and 22 in Chapter XIII tell us that matter and spirit are eternally different. It is matter that undergoes changes. The non-material spirit is the one who suffers pleasure and pain. But the Supreme Spirit is only the witnessing Master permitting the other spirits to go through experiences. He is the sustaining and consuming Lord of the universe.

"Abrahma bhuvanāllokāh punarāvartinah arjuna"

"Ksine punye martya lokam visanti"

The purpose of teaching the Bhagavadgita is more to convey the philosophy of the Vedas in its practical aspect than to describe the apparent cosmological features. Yet, there is some reference to cosmography too in so far as it has a bearing on the use of philosophical knowledge.

The two lines quoted above make clear mention of the six divine worlds above and the earth below them. The importance of the human world on earth is indicated as being the training ground for souls.

"Yadgatvā na nivartante tad dhāma

paramam mama"

This line tells us definitely that there is the 'Vaikunta loka' which is the suprememost and which is eternal. It also indicates that the trained souls enter that Abode of eternal happiness and they don't need to come back to earth. Vaikunta loka is fully non-material. Entering that loka means getting back into Brahman and not becoming Brahman. Saint Sri Vādirāja has pointed out that 'Aikya' means 'Ekatra bhāvah' or being together, and not 'Ekasya bhāvah' or becoming one. Grammatically, he says that 'Aikya' cannot be split as 'Ekasya bhāvah'.

It is usually believed that Sri Sankara-carya has considered this world as a mere illusory effect. But the late Sri Vedantam Subbiah Shastry of Bangalore says that it is not so. He has written a book, "Is the world an illusion according to Shankara?" His son, Sri Geetha Prabhu, B.Sc., B.E., M.E., dealt with this topic at the seminar.

Here we give quotations from the book referred to:

"The very words of 'Advaita' and 'Nirvi-'sesa' have been interpreted by the later commentators and text book writers in such a way as to suit their conclusions or 'Siddhanta'. They mean by the words 'Advaita' and 'Nirvisesa' that except Brahman nothing else exists; and as a result, they have decided and established that the world does not exist at all and it is only an illusion or misconception which ceases to exist after selfrealisation. This is proved to be contrary to Sankara's commentaries because Shankara has established that the world is as real as Brahman. Sankara has established clearly that though He is stated to be 'nirguna' and 'nirvisesa', Brahman alone is responsible for the creation of this universe, because He is Omnicient and Almighty by His nature."

"If Brahman is not the creator of this universe, He is no Brahman at all. Mere logical arguments by pandits with their vast learning of Sanskrit do not alter the facts.

The world is still here even for them to say that the world is an illusion."

There are two papers contributed to the Seminar, one by an eminent Christian Father

and another by a Muslim Scholar, both of which bring out the similarity between the puranic concept of the universe and the concepts held by the Bible and Kuran.

Father V. Francis Vineeth, CMI, L.Ph., Ph.D.(Rome), Ph.D. (Oxford), Director, Dharmaram Pontifical Institute, Bangalore, has explained how God is the Creator, Himself remaining the unchanging Centre in the form of 'Word'. All else is His reflection. This is exactly like Prahman, who is the original of Omkara, creating the whole universe by the vibrating effects of the mantras emanating from Omkara.

Quoting from the Psalms of David, the following lines are given -

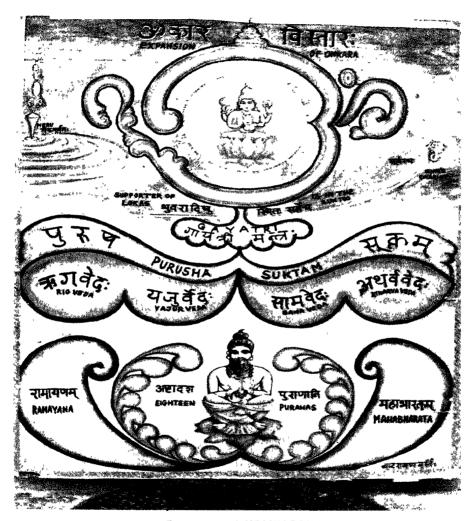
"Thou didst set the earth on its foundations, so that it should never be shaken Thou didst cover it with the deep as with a garment; The waters stood above the mountains At thy rebuke they fled; The mountains rose, the valleys sank down to the place which thou didst appoint for them."

Herein we find a parallel concept to the deeds of Adi Varaha Avatar, when the Lord brought up the earth from where it had been

kept sunk by the mischief of the demon Hiran-yaksa, and how it was set in its place, hardened by mixing the fat from the bodies of the demons Madhu and Kaitabha who were both killed by Ādi Varāha. Rising of the ocean waters above the mountains and their coming down refers to the 'Jala Pralaya' and the blessing deeds of 'Matsyāvatāra'. In fact, the first Manu, Swāyambhuva, 'Adi Manu' is the same as Ādimanu, Ādim, Adam, Adham. The Christian term Manoa is the same as Manu.

Historically considering the antiquity of the Vedas, we must admit on the evidence of the parallels shown that the Kuran and the Bible are only the echoes of the Vedas, all the three being no less than the 'Word' of God. That 'Word' which we call 'Omkara' is the same as - Aum, Aumen, Amen!

Father Francis Vineeth has beautifully summed up his thesis in the following words - "In the Christian vision of the beginning we have the infinite Being with its ineffable 'Word' in the centre. This Word becomes flesh, which when shared, gives rise to humanity which is placed in a universe prepared by the same 'Word' for its own human self-expression". Here, the 'Word' represents God; flesh represents Jesus Christ, the Saviour who appeared in a human body, and humanity stands for mankind in general. It



Expansion of "OMKARA"

is this last mentioned humanity which consists of individual beings who have to serve God and gain redemption.

Mr. T.S. Sanaulla Bintory, Reader and Head of the Department of Physics, Al-Ameen College, Bangalore, has presented a beautiful paper - 'Holy Kuran speaks - Universe and Man'. The following quotations from his paper go to prove why I call it beautiful.

"Glory to God, Most High,

full of Grace and Mercy,

He created all, including man."
"It is God who has
created the heavens
And the earth and all
between them in six days"

[The 'six days' concept of both the christians and the Muslims is indeed the same as six Manukalpas that went before the present Vaivasvata Manu Kalpa. Each year of a Manu being equal to three lakh human years and each Manu's life span being 1000 years, the six days spoken of will give us the figure 180 crores of years. Adding the period elapsed in the present Manukalpa, the total will be 200 crore years in round figures. Have the present day scientists taken all this into account before finding fault with religious texts?]

This idea is reflected in the following passage from the Kuran:

"The Angels and the Spirit Ascent unto Him in a day the Measure wherefore is fifty Thousand years." (S. 70:4)

Look at the following -

"God is He who
Created seven firmaments
And of the earth
A similar number." (65:12)

Here we find clear mention of the fourteen worlds spoken of in the Puranas. Seven firmaments means worlds located in the visible sky - Bhuloka, Bhuvarloka, Swarloka, Maharloka, Janaloka, Tapoloka and Satyaloka.

'Of the earth, a similar number' means the netherworlds within the bowels of the earth - Atala, Vitala, Sutala, Talatala, Mahatala, Rasatala and Patala.

Similar are the following lines -

"To Him belongs what is
In the Heavens and earth
And all between them,
And all beneath the soil." (20:6)

See also -

"See ye not

How God has created

The seven heavens

One above another."

(71:15,16)

Reference to the 'Kala Cakra' of the Puranas is in the Kuran thus -

"It is not permitted
To the sun to catch up
The moon, nor can
The night outstrip the day.
Each (just) swings along
In (its own) orbit
(according to law). (36:40)

The above first three lines hint about the retrograde motions of the sun and the moon with reference to the constellations. The moon's velocity in retrogression is greater. While the sun falls 1 degree behind the moon covers 12 1/2 degrees behind every day.

Sri R.P. Shenoy of Karkala presented three very interesting papers - (1) Dream, a stabiliser of the Cosmos; (2) Vortex drilling - a method to get energy from another dimension; and (3) Atom - a product of relative speeds of two vibrations. But, the subject

being too abstract for the present introductory content, details of the papers are not considered here. However, his concepts of + and - (positive and negative) vibrations as representing Purusha and Prkriti, and the concepts of the abstract 'Kāla' and 'Akasha' linked with the material world of 'Time' and 'Space', are really interesting and thought-provoking.

We now come to the paper presented by Dr. C.R.Raghunandan, a young and brilliant scholar well-versed in modern science and in the traditional sastras. The paper is 'Review of Bhugola Varnanam' by Saint Sri Vadiraja.

This paper is like a very good thesis prepared for a doctorate degree. As the author himself says, "This paper reviews this work of Vādirājaswāmy". His observation about the meaning of 'Bhūgola' is quite good, because most people are mislead by the modern meaning of the word and they need to know the right meaning. 'Bhūgola' in this context means 'Brahmānda', the golden shell covering the universe and not a globular earth of very small dimensions.

He prefers the yojana measure as being equal to six miles as it satisfies the puranic figures to be in agreement with actual measurements. For example, in Bhavisyottara

Puranam it is stated that the Tirumalai hills are situated 300 yojanas to the south of the Ganga. This being eual to 1800 miles (300 x 6), the measurement is exact.

The measurements concerning the land of gold, and the Lokaloka mountain around, is made a controvertial issue leading to some confusion. But Saint Sri Vadiraja's interpretation leaves no room for such controversy. Dr. Raghunandan's placement of mountains in the Ilavrita Varsha also leads to some confusion. His concept of 'Vayu Kurma' finding support on 'Vishnu Kurma' does not find mention in Saint Sri Vadiraja's 'Bhugola Varnanam'.

At the end of the paper he draws contrast between the puranic and the scientific views about the universe. His conclusion, that the modern measurements regarding distances between stars must be erratic, is indeed noteworthy.

Smt. Padma Nagaraj, B.Sc., B.Ed., in her paper 'Our concern about the Universe', distinguishes four types or rather grades of knowledge in the following manner -

(1) Jnana - Recognising something as such.

- (2) <u>Sujnana</u> Understanding the properties and uses of a thing.
- (3) <u>Vijnāna</u> Knowing the divine agency at work behind the apparent natural phenomena.
- (4) <u>Prajnana</u> Knowledge of Self and the Supreme Self.

Hence, according to this analysis, modern science is only 'Sujnāna' and not 'Vijnāna' as the indian scientists have preferred to call it.

She remarks that it is good to develop scientific attitude to know things precisely and to be guarded against religious hoaxes. But that itself does not help us to know what our concern is in this universe. The scienconcern is to know more and about the nature of things and to see how best they could be harnessed for the betterment of life here and now. Even a pure scientist is likely to be influenced by the society of which he forms a part; and the utility side of science does haunt him. industrialsits make the utmost use of him for their own profit. And even governments make use of him, generally for welfare works; but using scientists for preparing all sorts of weapons of war is quite common. So much so,

science seems to have reached demoniac dimensions and it has become the night-mare for every living thing.

On the other hand, a philosopher is concerned more about finding the ultimate cause behind the universe of our experience such that our life here may become really meaningful. But, human intellect having its own limitations, only religious philosophy is truly helpful to know our concern about the universe.

When we speak of religious philosophy, religious conflicts begin to stare at us. such conflicts are due to human nature and not due to religious teaching. Padma Nagaraj quotes the words of Sri Hidayatulla ('Heritage' - Dec. 86) who has said, "As the poet Ikbal has said, religion does not teach enemity and discard." is also his quotation from the Kuran prophet, tell those who do not believe in me that they are believing in some other God (God with a different name?). You are believing in your God. They are not likely to believe in your God and you are not likely to believe in their God. Their religion is for them and your religion is for you."

Hence, Smt. Padma Nagaraj stresses the need for leaning upon religious philosophy

which draws its tenets from revelation. Finally, she says "A thorough knowledge of Cosmogony and Cosmography is quite essential to realise the purpose of creation as ordained by the Creator, by which knowledge alone man can seek happiness here and hereafter; and that is his main concern.

Sri K.S. Venkatesha murthy, B.A., poses a question in his paper - "Is life worth living?"; and he endeavours to provide the answer. Selected parts from his paper are given here to make a summary of the answer.

"Science can solve problems only to create fresh problems. Scientists may assert that they can unravel every secret of nature in due course and that they can also find out the spiritual aspects of nature if at all they exist. How long will it take - a few million years ??? What is its relevence to you and to me if there is no soul to fall back upon?"

"A word about religion. Being scared by the ruffles resulting from religious fervour, many would like to keep religion away from public life. The ruffles are rather due to human weaknesses than to religions themselves. It is like taking an over-dose of a prescribed medicine or of an addicted drink. Because our eyes detract us by bringing

undesirable sights to view, is it wisdom to close our eyes and proceed?"

"My suggestion to the scientists is this Let them go on with their methods of understanding the world. But, at the same time,
let them attempt to understand Vedic literature in the right manner. That will surely
bring desirable benefits to one and all.
Their progress too will be quickened when
they come to know the substantial secrets
hidden in Vedic lore."

"With an understanding of the organisation of the universe according to the ordering by the Supreme Being, comes the understanding of the purpose of life. Through rough and smooth or thick and thin life is meant for the upliftment of the soul. True philosophy does not advocate detachment from the pleasures of life which are there to give a foretaste of eternal happiness. course, the cost of happiness here on earth is too dear; but it is quite necessary. According to Madhva Sāstra, life is enjoyable and worth living. Pleasure and pain are the 'Go through life and win lessons for life. the game' is the advice offered by Sri Purandara dasa."

Sri K. Mohan Rao, radio artist, presented a paper on the relevence of the Puranas. The

main point to note is that the puranas are the necessary commentaries to be relied upon to understand the true import of the Vedas. Only, they need to be carefully made use of to guard against interpolations, omissions or additions. "Itihāsa purānābhyām vedam samupabrimhayet."

It was my share to present the following five papers at the Seminar - 1) Basis for belief. 2) Creation and Structure of the Universe. 3) The fourteen worlds. 4) 'Kala Cakra' (Time Wheel) and 5) Relevence of Cosmogony and Cosmography.

Since much of the material contained in my papers is gathered from Saint Sri Vadiraja's 'Bhugola Varnanam' and from Srimad Bhagavatam and other relevent texts, I need not give a summary of the contents thereof. That will be made use of in the rendering of 'Bhugola Varnanam' itself where necessary. However, it may not be out of place to say a few things about 'relevence'. But I shall reserve it to be included as appendix to the text in hand - 'Bhugola Varnanam'.

By a perusal of the Seminar papers the following conclusions may be drawn -

1. Vedic literature is truly scientific; but it has escaped the notice of western

scientists whose investigations into the past stop with the Greeks of 600 B.C.; and they would give some light credit to the Chinese and never to Indians!

- 2. Although history books tell us that the cowherd Aryans composed the Rig Veda around 1500 B.C. when they had settled in the Punjab and that they composed the other Vedas later on, true historians like Max Muller have opined that the Vedas are the earliest human records and that their dates cannot be fixed.
- 3. The puranas were not composed by different Vedavyasas during the A.D.'s. They are the works of a single Maharshi of that name and they were composed during the early part of Dwāparayuga. Sri Sankarācārya and Ācārya Sri Madhva consider him as the very incarnation of Lord Nārāyana, the Creator Himself. It is no wonder then that he wrote the Maha Bharata long long even before the Kauravas and the Pandavas were born and that he could tell us about the Maurya period of Indian history in his Bhavisyottara Purana.

The Bible and the Kuran are also revelations - abbreviated and simplified Vedas, wherein we can find parallels in

plenty. Those two revelations are mostly meant for the people of this age who suffer under stress and strain of modernisation, especially in the western countries.

- 5. The Vedas are the richest mines of precious knowledge although the lava of the volcano of European Renaissance has covered the mining areas at present.
- 6. A few parallels hinted under item 4 may be examined -
 - (i) 'Amen' is the same as 'Aum' or 'Om'.
 - (ii) The syllable 'Om' is considered as the 'Word of God' in all the three revelations. The Muslims call it as "Alla ke ruh" (Breath of Allah).
 - (iii) Six days of creation is identical with six Manukalpas of the puranas.
 - (iv) Noah's Arc is the same as the ship held aloft by the Matsya Avatar of Visnu to save Vaivaswata Manu and the rest from the deluge (Jala Pralaya).
 - (v) Vaikunta = God's Heaven = Jannat.

- (vi) Nitya Naraka = Hell,
 (different from Purgatory) = Dozakh
- (vii) Fourteen worlds = Seven upper worlds = Bhuloka to Satyaloka and seven nether- worlds(spoken of in the Kuran) = Atala to Patala.
- 7. The European Renaissance gained ground because the Christian scholars of those days failed to satisfy those who began to question them. Perhaps, that was due to corruption and degeneration in the Church as history tells us.
- 8. The present plight of the Indians is that, being influenced by western scientific notions, they turn a deaf ear to Vedic teachings although there are pandits who can yet convince them as well as the western scientists.

When I wrote to Sri J.R. Lakshmana Rao, well-known scientist at the Manasa Gangotri in Mysore during the year 1972 requesting him to offer his candid opinion about my views, he wrote in reply-

"It is my opinion that you are trying the impossible, I mean the task of reconci-

ling the scientific view of the universe with the unfounded speculations of our religious men. There is absolutely no chance of your influencing my thinking."

Such is the pride and prejudice of our country-men at present to a very large extent.

- 9. Life is precious and the soul is hungry to seek realisation and release from the miseries of mundane living which presents more sorrow than happiness. We should learn the truth about human limitations while in a miserable plight and when in happier mood, we should think of the measures to be adopted to find eternal happiness.
- 10. Attempting to gain all the required knowledge through scientific methods and to gather all happiness by means of scientific gadgets is nothing but a wild goose chase. It is like rejecting a welcome feast and going a-begging for food.

"Siddham annam parityajya bhiksam atati durmatih.

11. The fundamental error that is being committed today by philosophers, scientists and the common folk is their

blind dependence on the theory of evolution and rejecting the truth about God and His creation. But let us see how systematic and convincing the Vedic description of creation is.

Modern scientific investigation stops at the Sky which they consider as vacuum. But an Indian scientist has recently announced that he can get electricity out of vacuum. Therefore it cannot be really a void without any material however subtle it may be - call it ether or by any other name.

Vedic literature tells us that the sky is formed by what is known as 'Akasa tatva'. Not only this. It goes to the very beginning of beginning. It tells us about three primordial non-cognisable modes - Satva (principle of light and knowledge), Rajas (principle of activity) and Tamas (principle of inertia, darkness and ignorance). At the commencement of creation, the Mistress of matter, Sridevi, creates disturbance (Ksobha) in the restful modes at the behest of Lord Narayana and brings out the three principles by the first, mild 'big bang' of pure Satva and pure Tamas. When pure Tamas is acted upon by pure Satva, the visible Satva, Rajas and Tamas (yellow, red and blue respectively) emerge from pure Tamas wherein they are hidden.

A further 'big bang', mixing the three principles - 100 Satva + 10 Rajas and 1 Tamas, brings out 'Mahat tatva' (principle of pure intellect). A part of 'Mahat tatva' is taken out and mixed with the three original principles in different proportions to form the 'Ahamkāra Tatva' (Ego principle) of three shades - Vaikārika ahamkāra, wherein Satva predominates, Taijasa ahamkāra, wherein Rajas predominates and Tāmasa ahamkāra wherein Tamas predominates. The first one is used to give subtle bodies to divine agents and to create the physical mind which finds location in our nervous system, in the spinal chord at the heart level.

We may here note that the mind is not something vague but the most subtle instrument made to receive impulses from the external world and to transmit them to the knowing 'Self', the owner of the body; also to respond to the external world on his behalf. The Self is a spiritual entity. He is the This individual knower and experiencer. self, inhabiting the body by the grace of God, is yet a learner being trained to reahimself. Therefore, the different functions of the body are governed by divine agents, the favourites of God. They know themselves and apprehend the events of the material world; and they help the individual self to know and feel.

Vidya Ganapati is at the gate of the mind opening towards the external world. part of the mind which is close to the presided over by Indra and Kama, the former taking cognisance of events and the latter creating desire. They receive impulses and offer responses on behalf of owner - self. Above them is Parvatidevi, spouse of Siva, receiving the impulses translating them into knowledgeable terms. Her sphere of the brim is known 'Buddhi' (informative intelligence). Above her, presiding over the third section, is Lord Siva, the Master of the Ego principle; and he makes the self to feel, 'I know'. There are two other superior compartments of the mind - 'Citta' and 'Cetana' presided over by Garuda and Sesa respectively, the former being responsible for sifting the right from wrong knowledge and consolidating it thinking, and the latter responsible storing knowledge as 'memory'. Thus we see that the mind consists of five departmental functions, of which we are well aware of the outermost compartment and have vaque notions of the other four. Is this not analogous to the conscious mind and sub - conscious mind of modern psychology? Does it not tell Vedic knowledge is vastly more that scientific than modern science?

Let us continue the chain of creation. Out of the second shade of Ahamkara Tatva. the abilities of the sensory and the motor organs are created. Out of the third, five subtle elemental modes are created - Sabda tanmātra (source of sound), Sparsa tanmātra (medium for touch sensation), Rupa tanmatra (medium of light that shows things), Rasa tanmātra (medium for taste) and Gandha tanmātra (medium for the formation of solid things which are generally characterised by smell). All the modifications of the original three modes described so far are of the subtlest kind from our view point although the lower are comparatively grosser than the ones higher ones.

The creation of Brahmanda, the golden egg enveloping the universe, is out of the 'Gandha tanmatra' also known as 'Prithvi tanmatra'.

Within the Brahmānda, the five gross elements are created by 'Alodana' or the 'big bang' into which modern scientists have had a good peep, but have failed to go much beyond the sky.

The sky itself is created by a process known as 'Panchikarana' (chemical combination) 120 parts of Sabda tanmatra being combined with 20 parts of each of the other tanmatras.

The air element is created by combining 120 parts of Sparsa tanmatra with 20 parts of each of other four. Similarly, fire, water and earth are created. These five are only gross elements appearing in the form of the 'NEBULE' of modern science. And it is really the 'big bang' within the Brahmanda that has been responsible for the creation of the elements of air, burning bodies, the planets and the vast earth, 300 crore miles in diameter, not the planet earth.

Excepting the agnostics among scientists, who have built up prejudicial complexes in themselves, all other great scientists have admitted the limitations of human knowledge and have declared that the mystery about the 'beginning' is ever a mystery for them.

The following are the words of Einstein himself; one of the most leading scientists of our days.

"The most beautiful and most profound emotion we can experience is the sensation of the mystical. It is the power of all true science. He to whom this emotion is a stranger, who can no longer wonder and stand rapt in awe, is as good as dead. To know that what is impenetrable to us really exists, manifesting itself as the highest wisdom and the most radiant beauty which our

dull faculties can comprehend only in their most primitive forms - this knowledge, this feeling is at the centre of true religiousness."

"My religion consists of a humble admiration of the illimitable superior spirit who reveals himself in the slight details we are able to perceive with our frail and feeble minds. That deeply emotional conviction of the presence of a superior reasoning power, which is revealed in the incomprehensible universe, forms my idea of God."

Vedic literature, therefore, comes to our aid where modern science fails and ends. Before concluding my introductory observations, I wish to pose the following questions to be squarely answered by scientists -

- 1. Light being mass converted into energy, does it not suffer resistence as it proceeds from a distant star before it reaches our optical instruments? If it has to face resistence in space due to known or unknown causes, how can we speak of the constancy of velocity of light through out the universe?
- However minutely precise be our geometrical or other methods based on parallax, spectroscope, classification of stars

3. According to Einstein's concept of Relativity, "the heart beat of a peson, travelling with a velocity close to that of light, would be relatively slowed along with his respiration and all other physiological processes. He would not notice this retardation because his watch would slow down in the same degree. But judged by a stationary time keeper, he would grow old less rapidly. In a Buck Rogers realm of phantacy, it is possible to imagine some future cosmic explorer boarding an atom-propelled spaceship, ranging the void at 167,000 miles per second, and returning to earth after ten years to find himself terrestrial physically only five years older." (Extract from 'The universe and Einstein' by Lincoln Barnet, a splendid book recommended by Einstein himself).

This phantacy is indeed fantastic. It need not be a phantacy, but reality. There is

a parallel of this in the puranas. King Raivata went to Brahmaloka, which is 7500000000 miles away from the earth, in the winking of an eye by means of yogic power and waited there a few moments before he could get an interview and consult Brahma about a suitable bridegroom for his daughter, Revati; and then he returned to earth to find that some lakhs of terrestrial years had elapsed by then. Both father and daughter had grown older by that much. (This is concerning persons of divine abilities born on earth unlike those of ordinary human beings).

Here, the main point to note is that the universe is not governed only by physical laws through out as our scientists would fondly believe without actual experimentation; there are also divine laws working through natural and supernatural laws.

Calculation of time is the same for all, depending upon the 'Kāla Cakra' (Time Wheel); but its application differs. A day of Brahma = 4320000 x 2000 human years; of other divine beings = 360 human days; of the manes = 30 human days.

Thus there is relativity as well as commonness of time in the three cases cited

Without putting to test this valid explanation how is it right to stick on to the Theory of Relativity or any other?

- 4. We speak of suns and solar systems within the millions of galaxies. Have the scientists found at least one more solar system within our own 'galaxy'?
- 5. We also speak of galaxies of different types. Are there any galaxies seen in the southern celestial hemisphere except the two Megallanic clouds? If not, what is beyond there to the south?

[For the information of scientists it may said-

- i) What looks like a galaxy is just a cluster of millions of divine vehicles in the form of stars, racing at unimaginable velocities around the upper worlds.
- ii) There are starlike planets, the abodes of Yaksas, Guhyas and the like, in the southern sky upto a certain extent. Srimad Bhagavatam, canto V may be consulted.
- iii) The upper worlds and even the neighbouring regions of our globe (perched at the southern edge of Jambūdvipa) are all invisible to our eyes and to our instruments because they differ in composition although the entire universe is

composed of the same elements. It is said in the puranas- "Adrsyā dhātavah sarve samutpannā jalā adayah"]

6. The question of questions is -

"Will our scientists ever get over the human tendency of succumbing to pride and prejudice in order to know the truth? Will they use a little introspection to shift from the mere physical to the spiritual?

Let the wise ones build up a growing community to save the world from the darkness of materialism. Let them hold the torch of spiritual light and let there be a Renaissance of religious culture based on Revelations.

Now, it is my pleasant duty to thank the Akhila Bhārata Mādhva Mahāmandala (Madras Branch) for having come forward to publish this work which was long pending publication. My special thanks are due to the office bearers of 'Dharma Prakash', Madras, for having taken the initiative in this respect. As regards the Seminar papers which I have freely made use of to weave my introduction, I should thank the donor who generously offered me Rs.10,000 to conduct the Seminar. He desires to remain incognito out of sheer modesty; but, as I have gauged, he is a

person of saintly qualities inspite of the unusual opulance with which God has blessed My thanks are due to him and his nobleminded secretary as well. I will be failing in my duty if I do not offer thankful respects to Sri Vijnananimidhi tirtha swamiji of Sri Sripadaraja Mutt, Mulbagal, who was good enough to declare open the exhibition on the occasion of the Seminar, and who is my well-wisher for bonafide reasons. My thanks are also due to my friend and well-wisher, Dr. Miles Davis (Patita Pavana Das), Director, International Institute of Indology, Inc., U.S.A., for his encouraging letter which arrived just on the eve of commencing the printing of this book. And I thank the proprietor and staff of Kamadhenu Printers, Tyagarajanagar, Bangalore, for their genial cooperation in printing this book. My thanks are due to M/s DYNARAM ELECTRONICS AND COMPUTERS, Bangalore - 4, for excellent computer composing of this book.

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BHŪGOLA VARNANAM

of

Saint Sri Vādirāja

==

INVOCATION

(Verses 1 - 8)

I bow down to the feet of Lord Nārāyana appears with His Horse-headed (Havagrīva), who is both far and near and is dear to those who always remember Him. He is not fully comprehended even by the Upanisads. He has afforded lodging in His heart to Kamalādevi (Sri Mahā Laksmi) who knows Him and yet knows Him not. He is verily the lake wherein the fish-like eyes of adoring devomove about sportively. He is indeed Hayagrīva. I bow down Lord to Sri Vyāsamaharsi, who is the sun that dispels the darkness of our hearts. He is the originator of all the sacred sciences. He is none other than Lord Sri Nārāyana, the Creator of all. Lord Vedavyāsa is like the thunderbolt that strikes at those who choose the wrong path and mislead others.

My salutations to Sridevi, the highest in intellect and the model of modesty, but fearless at heart. Her looks are tenderly kind in bestowing wealth; and at the same time they make our hearts free from all sorts of afflictions. My salutations to Bhūdevi, sister-like to Sridevi. She blesses us with wisdom. She was graciously lifted up by the tusk of Lord Varāha (God who appeared in Boar form)*. She is the abode for saints who find joy in the scriptures. She makes the godminded souls happy.

I bow down again and again to Ācārya Sri Madhva whose glory finds praise in the beginningless Vedas, who is without any flaw and is quite pure, whose intellect is the highest, always engaged with the memory of the Almighty Lord, whose glory is the subject matter of the Vedas. His form is quite enchanting and it fills one's heart with the milk of kindness. Similarly, I offer my salutations to Bhāratī devi, fully endowed with female virtues, custodian of the principle of intellect, a bee of devotedness at the lotus feet of Sri Hari, the foremost among the souls of her kind and the bestower of opulance to the devotees of God.

My salutations to all spiritual masters who discard the evil-minded ones as enemies and help the good souls to sail across the

ocean of life; and who bestow boons like the wish-fulfilling tree to those who serve them faithfully.

[* Here is reference to the episode of bringing up the submerged earth at the beginning of Svetavarāha Kalpa when the Lord in Boar form killed the demon Hiranyākṣa and replaced the earth in its place after making it hard and unfoldable by mixing with it the fat of the demons Madhu and Kait*abha who were also killed.]

THE BRAHMANDA

(14 - 17)

Brahmanda or the hollow golden shell containing the universe is fully round in every direction, east to west or north to In it, twice its inner complement is Ghanodaka (solidified water) and the region of darkness is circular in shape, lying as it does within the Ghanodaka stretch. It is twice as wide as the circular earth which occupies the middle part. Upanisads describe earth as 'Prithvi' - that which is spacious with abundance of wealth for living The earth is said to stretch beings. to sea as the brahmin seers conceive it. It has the Meru mountain at its very centre and it contains seven islands and stretching around the Meru They are circular in form. The three together

- earth, dark region and Ghanodaka - measure fifty crore yojanas from end to end. This is factual and not fictitious.

MEASUREMENTS OF THE THREE REGIONS

(in the ratio of 1:2:4) (14 - 17)

Of the three regions mentioned, the earth occupies a circular stretch having a diameter of seven crore yojanas. Being double that in the region of utter darkness stretch. measures fourteen crore yojanas. Considering the stretch of Ghandodaka as being twice that of the dark region, 'it measures twenty eight crore yojanas. From the Meru centre, the earth measures 3 1/2 crore yojanas in all The region of darkness and the directions. Ghanodaka region measure 14 crore and 28 crore respectively putting the opposite parts Therefore each of the opposite together. parts measure only half of the said count.

DISTRIBUTION OF THE REMAINING ONE CRORE YOJANA

(18 - 54)

As detailed heretofore, 49 crore yojanas are distributed among the three regions, (7+14+28 = 49). The remaining one crore yojana should be converted into lakhs. Of the 100 lakh yojanas, 14 go to earth, 28 to

the dark region and 56 to Ghanodaka. Thus, 98 lakh yojanas are distributed leaving a balance of 2 lakh vojanas. This should be converted into Thousands (two hundred thousand). Of these, 28 thousand for earth. 56 thousand for dark region and thousand for Ghanodaka are distributed. 196 thousand being thus distributed, the remaining 4 thousand should be converted into hundreds (40 hundreds). The earth takes 5 hundred, the dark region 10, and Ghanodaka Now the total is 35, leaving a balance of 5 hundred yojanas (500). This is distributed in the ratio of 70:140:280, making a total of 490, with a balance of 10 yojanas. This 10 is distributed as 1:2:4; only 3 yojanas now remain.

An intelligent person converts the 3 yojanas into 12 krosas (1 yojana = 4 Krosas). Now, the distribution is as follows -

1 1/2:3:6.

Thus, 10 1/2 krosas having been distributed, 1 1/2 krosas still remain. The table of measurements being-1000 dandas = 1 krosa, and 4 krosas =1 yojana, 1 1/2 krosas means 1500 dandas (staff length). Distribution - earth 214, dark region 428, and Ghanodaka 856, thus making a total of 1498 dandas. The remaining 2 dandas convert

themselves into 8 hastas (4 hastas or cubits = 1 danda). Distributing as 1:2:4 for the three regions respectivly, the balance will be 1 hasta which is equal to 24 angulas (inches). Again, after distributing as 3:6:12, three inches still remain to be distributed. 3 Vrhis make 1 angula (Vrhi means a paddy seed). Therefore 3 angulas are equal to 9 vrhis. Distributing as before - 1:2:4, the length of 2 vrhis still remains to be distributed. One vrhi being equal to seven sarsapas (mustard seeds), now we are left with a stretch equal to 14 sarsapas put side by side. The distribution being as 2:4:8, no balance remains.

The Vedic mode of measurements being in this manner, measurements in all other respects must follow suit. Lord Sri Hari who came down incarnated as Sri Vyāsa Maharsi, has thus shown the mode of distribution in the ratio of 1:2:4 - each unit being a seventh of the whole. Therefore the Puranas tell us that the hollow of Brahmanda measures exactly fifty crore yojanas. The fractional parts being added to 7, 14, and 28, the total will be 50 crore.

[We may note that the measurement is exactly precise even to the extent of a single mustard seed. The 2 mustard seed measurement(attributed to earth in

the final analysis are distributed as one on each of the opposite sides of the circumference.]

TABLE OF MEASUREMENTS

7 Sarsapa	ıs	-	1	Vṛhi				
(mustard	seeds)		(length	of	а	paddy	seed)

ACTUAL MEASUREMENTS

Region	Earth	Dark region	Ghanodaka	
Yojanas	7,14,28,571	14,28,57,142	28,57,14,284	
Krosas	1 1/2	3	6	
Dandas	214	428	856	
Hastas	1	2	4	
Angulas	3	6	12	

Vrhis 1 2 4
Sarṣapas 2 4 8

[The distribution is perfect to a mustard seed when it is in the ratio 1:2:4. How did Saint Sri Vadiraja learn such mathematical procedure? Not at any present day schol at all! He was a master of Vedic mathematics. Could the 'Cowherd Aryans' create such mathematics around 1500 B.C.? Then, is it not the gift of the ageless Vedas? Certainly, the evolution theory loses ground.]

Fractions of sevens, seventies and the such of the one crore remainder being added to 49, it makes the 50 crore yojanas - the measurement of the hollow space within the Brahmanda. Since corn seeds and other things were larger in size during the 'Krta yuga', the measurements are based on the sizes of the mustard seeds and paddy seeds of that yuga. The earlier sages have kept these points in view when they have declared that the Brahmānda interior measures 50 crore yojanas.

[Tolstoy's story, 'Grain as big as a Hen's Egg' bears witness to the fact that seeds and the like were bigger in the Krta age. For the same reason, a man's cubit measured 24 inches then as against 18 inches now obtaining. Consequently, the average height of man in those days was 8 feet, of course, leaving margin for

abnormalities. Incidentally, we may note that Acharya Sri Madhva is described as a personality of eight feet in height and that every one could have darsan of the bust of that personality as he moved in the midst of crowds in procession.]

The earth was created in the Krta yuga and therefore its measurements agree with the standards of that age. Lord Sri Mahā Viṣṇu created the earth during the first Krta yuga of the first 'Kalpa'.

[Here, a 'Kalpa' means a day of the four-faced Brahma, the obvious creator. The first day of his 51st year was devoted to the creation of the earth and all other things. A day of Brahma is equal to 1000 'Mahāyugas' - the four ages Krta, Treta, Dvāpara and Kali put together; and his night is of equal duration. The four ages rotate in the same order. Creation of the earth was during the very first Krta yuga. The first day of Brahma, referred to above, goes by the name 'Padma Kalpa' since the created earth and the heavenly regions followed the patterns of the lotus flower. This period lasted for 432 crore human years. - Mahāyuga = 43,20000 x 1000 years.

On the second day of Brahma began the 'Sveta Varāha Kalpa', of which mention has been made in respect of lifting up the earth to its position by Lord Varāha, God in Boar form. This Kalpa has run a course of six Manu Kalpas and we are now under the regime of the seventh Manu, Vaivaswata. The first one

was Svayambhuva Manu or Adi Manu. (Compare - Adima, Adim, Adam, Adham). From the commencement of regime of Adi Manu it is 197,29,49090 years upto 1989 And, from the commencement of Padma Kalpa when the earth was created, it is 1060 crore years in round If only the Christian pandits had this, the geologists and biologists of the Renaissance period in Europe would not have found fault with the facts about creation as presented in the Bible. according to the Bible, 6000 years means six Manu Kalpas, each Manu's life-span being 1000 years. Manu's regime lasts for 71 Mahayugas. Therefore each year of a Manu is equal to 300000 human years. multiplied by 6000, gives a figure of 180 crore years. Since the Bible says that it is 6000 and odd years, add the period covered by 27 Mahayugas of Vaivaswata Manu Kalpa + Krta, Treta and Dvapara and 4989 years of the present Kali age; and that will be 17,29,49089 = 197,29,49090 years as given in our 'Pancanga' (Hindu Calendar).]

THE TERRESTRIAL REGION

(55 - 58)

Basing our concept on the measurements indicated here-to-fore, the earth should be understood as consisting of the seven islands and the seven oceans, the middle most island Jambudvipa measuring one lakh yojanas, and each of the outer islands being twice as large as their inner complements. Similarly, the seven surrounding oceans too should be

considered. Thus, the diameter of the circular earth measures 5 crore and 7 lakh yojanas upto the encircling land of gold, which itself is surrounded by the land of diamond. The last two are known as 'Antyādhyardha sthala' This point will now be discussed.

ANTYĀDHYARDHA STHALA

(Land of gold and land of diamond)

With reference to the location of Lokaloka parvata (which surrounds the entire terrestrial region) the measurement of earth other than 'Brahma bhumi' is said to be 6.08 crore yojanas. To reach the full measurement of 7.14 crore yojanas, we still require 1.06 crore yojanas. The measurement given for the region around Suddhodaka ocean being 1.28 crore yojanas, the land of gold should therefore measure 64 lakh yojanas on each side. 'Adhyardha' does not actually mean half; but it means 'with a little addition to half'. Therefore, a little more than half of 64 should be taken as 42 instead of 32 in order to satisfy the scriptural statement.

[If this procedure is followed, the total measurement will be -

- i) Earth with seven islands and oceans 5.07 crore
- ii) Land of gold, both opposite sides 0.64 --"--

0.64 -- "--

iii) Land of diamond, both sides

- 0.42 --*--- 0.42 --*--

7.19 crore
yojanaş

The excess of 5 yojanas (7.19 - 7.14 = 0.05) should be assigned to Brahma bhumi extending beyond 'Vajralepa' (Land of diamond) and forming part of the foot of the Lokaloka mountain - just a fringe of it.]

If this position is not maintained, the measurement of the Brahmanda interior would be more than 50 crore yojanas. If the Land of gold is taken to measure 96 lakh and the land of diamond, half of that - 48 lakh, then the terrestrial region would measure 5.07+0.96+0.96+0.48+0.48 = 7.95 or 8 crore yojanas. Following the ratio of 1:2:4, the Land of darkness will have to measure 16 crore and Ghanodaka, 32 crore. The total would would be 56 crore yojanas; and this is entirely wrong.

What has been said herein about the Land of gold and Land of diamond is in agreement with the opinion of Acarya Purnaprajna. If the fringes of the earth were just earthy, it being prone to denudation, the measurement, given as exact to a mustard seed would not remain constant. Hence Lord Sri Hari has created the hard diamond land around.

[Finally Saint Sri Vādiraja says in all humbleness that his statements are certified to be correct by Acarya Sri Madhva, residing in his heart.]

ANDHANTAMAS

(Region of complete darkness)
(79 -83)

pit of darkness known The as 'Andhantamas' is situated below the earth level, sunk in Ghanodaka. This region surrounds the Lokaloka parvata and is termed as 'Adhogati' or the downward path. Because 'Anonantamas' is below the level of Ghanodaka, it is possible for sinners to qo down into it to some extent and to come That they go down and come up has been stated by Sri Vyasa maharshi, the author of Brahma Sutras.

[The pit of darkness is very very deep. Sinners, who deserve greater punishment than what they may suffer in the ordinary hells, are made to go down into the pit of darkness to some extent and they come up. But those, who are thrown down into the lower parts known as 'Tamas', 'Mahā Tamas' and 'Andhantamas', never come up. They are the third kind of souls who are doomed to suffer in the eternal hells.]

The principle of darkness extends even higher than the Lokaloka parvata which is 51

lakh yojanas high. It is petrified darkness like water turned into ice. If it were not so, where was the need for Sri Kṛṣṇa, Lord of the Yadus, to create a tunnel through it by means of his Cakra (disc weapon)?

[The Cakra weilded by Sri Krsna is of the principle of light in the main. It is praised thus - "Sudarsana mahājwāla koti sūrya sama prabhā" - a weapon blazing with the brightness of crores of suns. When Sri Kṛṣṇa had to drive Arjuna's chariot towards 'Anantāsana' in the Ghanodaka - far beyond the petrified circle of darkness, he had to cut through it and make a tunnel. It was easy for the disc of light (Cakra) to cut through the darkness. This was on the occasion of bringing back the dead son of the Guru.]

From time immemorial, demons like Kali and his troop have been dropped into this pit of darkness and are bound to suffer acute Their number is uncountable. (It is because there are innumerable Kalis with followers, those who were thrown into their 'Andhantamas' during the countless previous Brahma Kalpas.) Even during 'Maha pralaya' (the long period following final dissolution of the universe), just even like Vaikunta loka, this hell remains in its place without undergoing extinction by the consuming fire of 'Pralaya' and the like. But the suffering demons of that region are taken up into the belly of Sri Hari (who rests on the banyan

leaf like an innocent child). Even when the demons are there in God's belly, they suffer pains so natural to their own non-material bodies - sore-eyes, headache, stomach pain and also different kinds of bodily and mental illness. (Body here means the non-material body). Again, by the command of Sri Hari, they are assigned to 'Andhantamas' - the hell of eternal damnation, when another universe is created. There they are tormented by fire, rock-fall, sharp weapons and piercing beaks of birds; and by being made to wade through excretion, urine, blood and the like. They suffer varieties of pains as they did during the previous Kalpas. No doubt, it is their fate to suffer in 'Andhantamas'; but such suffering is the need of their very They are incorrigible, veteren nature. whose perverted knowledge sinners. (Mithyājnāna) makes them so.

Because the selves are non-material, they cannot be cut to pieces and made into parts. As such, rock-fall or use of weapons do not destroy the spiritual selves; they only inflict pain. When the demons are made to suffer being bit by leeches with diamond-like teeth, being subjected to the heat of fire, by rock-fall, or by being made to wallow in the mire of excretion, urine and blood, and by hearing constant wails and fearful cries, or when punjent and bitter liquids are poured

into their eyes, ears and noses, it is their innate sorrow that expresses itself. These painful experiences are referred to as 'Panca Kaṣta' (five-fold torture affecting the sense organs) - hearing hurtful cries, seeing horrible weapons, smelling nasty things, torture suffered by the taste of hot liquids, and suffering cuts by sharp weapons.

[For any ordinary person, this description appears to be repugnant. But that is due to the wrong notion of universal kindness. Those who plead for divine mercy for one and all are only the kind-hearted good souls: it is not the demons themselves. They prefer suffering and blasphamy; and they find pleasure in it. It is like Satan in Milton's 'Paradise Lost', saying "I can make a Heaven of Hell". This aspect is not very easy to appreciate unless one takes the trouble to understand what the non-material soul is and differ from each other by their natures. (The mango tree prefers the sweetening minerals for its growth while the neem tree prefers only minerals that give bitterness.)]

THE NETHER WORLDS

(93 - 98)

Within the hollows of the earth down below are seven worlds ranged one below the other. They are Atala, Vitala, Sutala, Talātala, Mahātala Rasātala and Pātāla. Each of these is 10000 yojanas in extent

(width and height). Thus they occupy a total area of 70,000 yojanas. The Meru mountain has its base into the earth to the extent of 16,000 yojanas. The gaps between the seven nether worlds make a total of 3000 yojanas (500 yojanas in each case). The earth extends still further below to a depth of 11 thousand yojanas; it is all rocky in nature. (16+70+3+11 = 100 thousand)

[In Srimad Bhagavatam, the eight directional elephants (Asta diggajas) are said to be standing beneath Pātālaloka, supporting the worlds above them. Evidently, their location should be within the range of the last mentioned 11,000 yojanas.]

ĀDI SEŞA (99 - 102)

Ādi Seṣa is worshipped by all the serpents of Pātāla loka. He has his situation in the Ghanodaka down below; and he is immortal. He finds himself supported by 'Vāyu Kūrma' - Mukhya Prāna in tortoise form; Ādi Seṣa's tail rests thereon. He is quite strong. Lifting one of his thousand hoods, he supports the worlds above him so that the earth does not sink into Ghanodaka. Hence he is hailed as 'Sarva loka dhurandharah".

[Hearing about the effort put by Adi Seşa in keeping the earth from sinking down, any modern person

is sure to laugh at the very idea in view of Newton's Law of Gravitation. But, one who knows the truth, at the modern man for his sheer ignorance. The earth is not just a globe of 8000 miles in diameter, going round the sun. In fact, it does not move at has a stretch of 30 crore miles, with the mountain at the centre and the nether worlds The gravitational force is towards 'Visnu Kurma' who supports the Brahmanda with the whole within it. Gravitational force is nothing but the will of the Omnipotent Lord working through material bodies. God's ways are wonderful, not easily understood just by human intellect. He has huge forms as well as forms which are more minute than the minu-The 'Visnu Kurma' form enters into the various 'Vayu Kurma' forms giving gravitational forces to all things - big and small, according to their masses. Therefore, we may say that Newton's quess was right; but he had no chance to know the whole truth. secret of secrets is that it is the Omnicient Himself who acted as the original (Bimba) of Newton or Keplar or Einstein and discovered certain secrets nature - of course not all, only to work out the features of Kaliyuga. He is known as 'Yugadikrt'.]

Ādi Sesa by himself, is not competent to support the worlds. His strength is derived from the Supreme Lord 'Samkarṣana', whom he worships in his heart. The space occupied by Ādo Sesa om Ghanodaka is 99,000 yojanas.

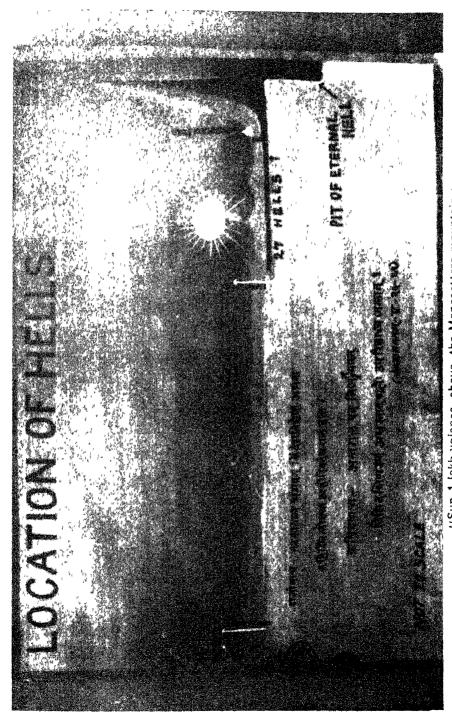
[In fact, the Serpent form supporting the worlds is Lord Samkarsana Himself; and He is known as 'Ananta'. Ādı Sesa is only like a tool in the hands of a master.]

LOCATION OF HELLS

(103 - 107)

On the left hand side (south, in this instance) lower than the visible earth level. there is a big moat, many yojanas wide and deep. At its edge is 'Samyamanipura', God Yamadharma's city, where he is always attending to his duties. There are thousands of his servants who are very cruel by appearance. The 'Vaitarani' river is here; and it is a terror to sinners. After crossing this river with a foretaste of the sufferings store, they are taken down into hells like 'Raurava', which are horrible. Thousands of such hells are there for punishing sinners of different kinds. These hells are in the southern direction, at the level of the 'Astadiggajas' beneath Pătāla loka.

Another capital city of Yamadharma's kingdom is also in Heaven. It is the harbinger of happiness to those who have done meritorious deeds here on earth.



Moon-1 lakh yojanas higher (near our globe); and location of hells." "Sun-1 lakh yojanas above the Manasottara mountain;

[The directions spoken of in the Puran as are not conventional as the modern Theory of Relativity would consider it. Just as there is the Samyamanipura of yamadharma on the slopes of the Mānasottara mountain, there is the Devadhāni, city of Indra, 90 degrees away from it on another part of the mountain slopes. Another 90 degrees away from it and just opposite to Devadhani, is the Nimlochani city of king Varuna. Just opposite to Samyamanipura there is the city of Alakāvati, where Kubera is the King].

The Meru mountain being the central relative point of reference, the four cities are said to be to its south. The Meru mountain itself and the Pole right above it at the tail end of Lord Simsustar, to the north of all else on earth. are Bharatadesa, the heart of Bharata Khanda, faces the south; and sunrise to the Bharatiyas (Indians) is in the longitudes of Indra's city, Devadhani. That is east for Indians. When this is decided, it is easy to decide the other directions. For India, Japan is in the eastern longitudes and it is appropriate to have called it as the 'Land of the Rising sun'.

In Srimad Bhagavatam, the hells are said to be located beneath the earth, but above Ghanodaka. Since the hard earth extends downward, upto where it finds support on Adi Sesa's head, the hells, which are in line with the directional elephants, are naturally above Ghanodaka and below the surface of the visible earth.

Here is substantial ground for us to conceive that the seven islands with their surrounding oceans, are not flat like a single rupee coin; but they take a terraced type of arrangement. Thus, the Puşkara Dvīpa is two lakh yojanas lower than the upper edge of the basket-like Jambudvipa; and the surface of Ghanodaka, beyond the region of darkness, is in line with Puşkara dvīpa. The location of hells is slightly above this line.]

<u>VIŞNU KÜRMA</u> (106 - 109)

Underneath the earth borne by Adi Seşa, Ghanodaka extends to a depth of 24 crore, 99 lakh yojanas, where it touches the golden shell of Brahmanda. That shell itself is 100 crore yojanas in thickness; and it rests on the back of Viṣṇu Kūrma, almost like an atom.

[In the case of Ādi Śeṣa, the weight of the vast earth is compared to that of a mustard seed; in the case of Viṣṇu Kūrma, the weight of the Brahmānda, with the entire universe in it, is compared to that of an atom. Really speaking, this is only to make us to see the difference between Ādi Seṣa and Mahā Viṣṇu In the case of the latter it is no weight at all.]

THE UPPER WORLDS

(110 - 123)

Including the visible terrestrial world, the upper worlds are seven in number, the seventh and the uppermost being 'Satya loka'.

The 'Antariksa loka' begins one lakh vojanas above the earth. The 'Svarga loka is at an altitude of 50 lakh yojanas. It beautiful with divine Palatial buildings. Antariksa loka and Svarga loka are one crore yoianas breadthwise. Above Svarga loka is 'Mahar loka', at an altitude of 75 lakh yojanas above the former. It is populated by Siddhas and rsis in large numbers. Above it is 'Jana loka' at an altitude of 1,12,50,000 yojanas. Then comes 'Tapo loka', 1,68,75,000 higher up. This loka is fully populated with Siddhas and rsis; and provides abundance of amenities of all kinds. now spoken of - Maharloka, three lokas Janaloka and Tapoloka, have abodes beautified with varities of gems in plenty. The extent of these three lokas is similar, each measuring a third fraction of 50 crore yojanas and 16,66,66,666 2 Putting together the altitudes of all the lokas spoken of and adding the between the adjecent lokas, the total altitude will come to 4,06,25,000 yojanas.

Having a simialr distance in between, the 'Satya loka' begins. Therefore, it is at an altitude of 8,12,50,000 yojanas That is where Brahma's abode is the earth. situated. Its extent is similar to that of the three lokas beneath it. The Satya loka itself has an altitude of 4,12,50,000 (The total altitude of all the vojanas. upper worlds will be 16,25,00,000 yojanas). The Satya loka of Brahma is shaped like a tuber at its base. It is somewhat thin in the middle like a stalk and, at the top, it spreads out all round like the petals of a lotus flower. It is very very wide.

The lokas of the universe, being all shaped to resemble lotus flowers, the whole thing looks like a huge lotus blooming upon the Ghanodaka.

[Considering the earth itself, we should take into account, the pedestal-like Jambuddvipa, the terraced arrangement of the other six islands and the mountain ring of Puskara dvipa; and also the other mountain ranges of the other islands. Then, Bhuloka verily looks like a huge lotus flower.]

VAIKUNȚA LOKA

(129 - 133)

At an altitude, twice that of Satya loka, there is Visnu loka, which the seers call

Vaikunta. It is at an altitude of 16,25,00,000 yojanas above the earth. Its extent is twice that of Brahma's loka. It is neither created, nor destroyed. From its centre at the base, right upto the shell of Brahmanda, it measures 8,75,00,000 yojanas. It is there that the released souls move about in celestial planes of the non-material world.

THE BRAHMANDA

(129 - 133)

Measuring from the base of the Meru mountain, upto the shell of Brahmānda above, it is 25,00,00,000 yojanas. All the lokas are contained within this range. Upward, eastward, westward, north or south, or in any other direction it measures 25 crore yojanas. This is with reference to the centre at the base of the Meru mountain. But, putting together the measurement from the Meru centre towards the south upto the shell of Brahmanda, the Brahmanda as a whole measures fifty crore yojanas every way from end to end. It is fully round and made of gold. It's thickness is 100 crore yojanas.

THE THREE ABODES OF VISNU

(133 - 149)

Upon the Ghanodaka on the northern side is the Abode of Viṣṇu, known as 'Anantasana'.

It is Sridevi who is in the form of that loka where the released souls are. The learned say that it is at a height of one lakh yojanas. A similar Abode is in the milk ocean (Kṣira Samudra) at an altitude of one and a half lakh yojanas with reference to its neighbouring earth. This Abode is called 'Sveta dvipa'.

The three Abodes - Vaikunta, Sveta dvipa and Anantasana are only the forms of Sridevi. (They are non-material). They are thronged again and again with limitless numbers of released souls; and yet, they afford more and more accomodation. They are never completely filled up. Even a hall constructed by Visvakarma (the architect of gods) is able to accomodate limitless number of persons and Then, is it any wonder that the things. Abodes of Visnu are ever more and more accommodative? The belly of a sage (Sage Agastya) could contain the ocean. As such, the three Abodes of Visnu certainly possess wonderful capacity since they are no other than Mahã Laksmi, the source of all abilities. During the period of 'Maha Pralaya' the released

souls enter the womb of Visnu; and there too, they are happy since their non-material bodies are just the stuff of joy. During the period of creation, they return to the said Abodes. Their joy consists in praising the Lord's glory - Joy Galore, prostrating at His feet and looking at His admirable form, often and often. They also enjoy different kinds of pleasures - of course, non-material.

The capital city of Vaikunta, Ayodhya by name, lies within seven fortifications and only the released souls enter into it. This city brightens the directions all around on account of its beautiful terraced quarters, adorned with wonderful gems. This city area is called 'Parama Vyoma' - non-material space. Around this city of Ayodhya flows the 'Viraja' river which rids the souls of the burdens of their causation bodies (linga Sarīras) when they take a dip in its waters. The river is like a moat encircling the city. No unreleased soul can ever cross it. the seventh inner gate of the outer fortifications there is fear of bondage on account of the 'Pradhana Vyoma' (material sky) there. Within the bounds of the Viraja river, this sky is powerless. Hence it is declared in the Puranas that it does not exist there. Therefore, the Viraja river is said to flow betweeen the material sky and the non material sky. Brahma takes a dip in that river with the other eligible souls at the time of release from bondage. The causation bodies of all of them are got rid off; and then they get into the inner city, Ayodhya. Even Brahma goes only upto the seventh gate of the outer fortification before release; he does not enter the inner city. Then who else can?

[The city of Ayodhyā has seven rounds of fortification with abodes and inter spaces. These are meant for the released souls of different grades. Right in the middle of the quadrangle inside the fortification, there is Viṣṇu's superb mansion with its three fortificatons.

The 'jīvanmuktas' (souls who have no need of rebirth, but are yet with their causation bodies) are permitted to enter the outer fortifications of Vaikunṭa loka and to share the joys thereof. It was here, at the seventh inner gate, that Jaya and Vijaya were cursed by the four sages of tender age - Sanaka and the others. The binding force of Māyā is there. This part of Vaikunṭa gets destroyed during 'pralaya' and is reconstructed when a new universe is created.}

NINE OUTER ENVELOPES

(150 - 152)

The golden Brahmanda is the earthy envelope surrounding the universe. It is one hundred crore yojanas thick. Surrounding it

are nine other envelopes, each ten times bigger than its inner complement. They are the envelopes made of the subtle material principles - water, fire air, sky, ego (ahamkara tatva), intellect (mahat tatva), Tamas, Rajas and Satva. The fourteen worlds of the universe are all contained at the core of these envelopes. Such is our wonderful universe. But, with all its envelopes, it is so tiny that it is not enough to occupy fully a 'single hair-pit on the body of Lord Sriman Narayana. Then, who else among the gods can stand comparison with Him? Let the learned ones find out.

[The universe, with its ten envelopes (including the earthy envelope of Brahmanda), measures 1000000000050 crore yojanas. If this cannot fully occupy a hair-pit of Lord Nārāyana, imagine his stature! This form of the Lord is known as 'Brihan Nārāyana'. Hence it is said of him "Atyatiṣtat daśangulam". 'Angula' here means each one of the envelopes. The same Lord Nārāyana is also in our forebrain (cerebrum) with the name 'Vāsudeva'. Measuring from the chin upward with fingers held sideways, He is above the measure of ten fingers.]

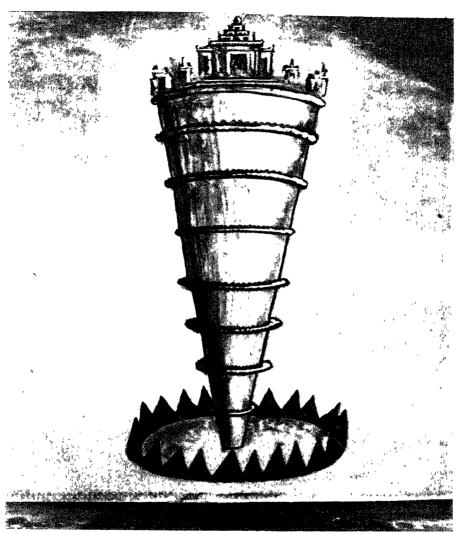
THE MERU MOUNTAIN

(153 - 163)

The golden Meru mountain is one lakh yojanas high. It is surrounded by the nine

Khandas (Varsas of Jambū dvipa). It is the abode of Siddhas (souls who have attained a high degree of perfection). For all measurements concerning the universe, the Meru is the central point of reference. This mountain is thin at the base and goes on broadening gradually towards its top which is quite broad. The mountain resembles the 'Unmatta' flower. At the surface base it has a width of 16,000 yojanas and it goes down into the earth to the extent of 16,000 yojanas. From the base upto the top, the Siddhas and yogis dwell.

At the top, the mountain has a width of 32,000 yojanas. It is round at the and three sided at its base (like the cornered base of a nail). From the base to the top the mountain measures 84,000 yojanas. The circumference at the top is 96,000 yojanas (in round figures). There, in the middle, is the city of Brahma, known as 'Satakaumbhi'. Its palatial mansions are beautified with rare gems. The city is 10,000 yojanas long and equally broad. There, the Gandharva chiefs, the prominent ones among the Siddhas, sages like Vasista and gods headed by Indra worship Brahma seated on the throne of gems. At the edges of the Meru top there are eight cities of the



"Meru Mountain" with Brahma's abode at the top.

directional gods, one in each of the eight directions. The Meru mountain supports them all.

THE RIVER GANGÃ

(164 - 171)

River Ganga pours down constantly in the open courtyard of Brahma's palace such he might use the waters for his +hat 'Sandhyā vandana' (worshipping Surya Nārāyana thrice a day - morning, afternoon and evening). The other gods there, also use it. By Brahma's behest the river Ganga takes four courses to come down to earth from the Meru top and to purify the denizens here. Even now we can see it. branch 'Sīta' joins the sea (Lavana Samudra) the east. 'Alakananda' pours the southern sea and is quite famous as the purifier of the world. The branch 'Caksu' reaches the western sea and 'Bhadra' the northern sea. This river purifies those who use its waters in worshipful manner where ever they be in the four quarters (of Jambūdvipa). The river was again brought to earth in another form by the efforts Bhagiratha. This river is called 'Mandakini' in the Himalayas. When it began to pour down in the Himalayan region, Siva locked it up in the meshes of his knotted hair. (This was to mitigate the force with which Gangā came down; hence the name 'Mandākini'). Being let down from the knotted hair and following Bhagīratha the fresh flow of waters joined the original course of the river; and after crossing the point at 'Devaprayāga', the river went down into the bowels of the earth to reach 'Kapila āśrama' in the nether world to sanctify the ashes of the 60,000 sons of Sagara cakravarti, burnt down by the angry look of Sage Kapila.

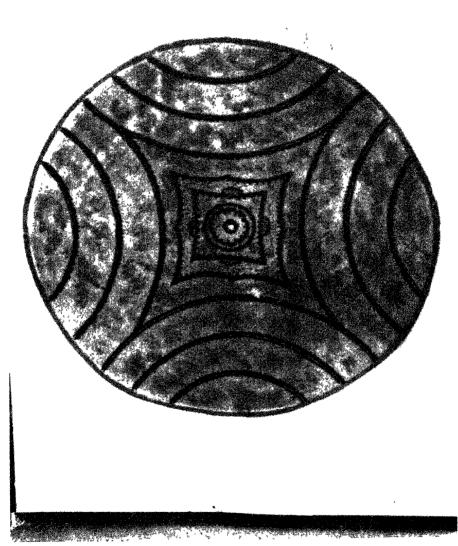
[The Gangā river flows in visible and invisible forms. ('Rūpāntarena vahati), it is also in the form of the stars of the Milky Way ('Ākāsa Gangā')].

ILĀVŖTA KHANDA

(171 - 183)

This Khanda (Varsa) spreads around the Meru base which measures 8000 yojanas from its centre, in every direction. There are four supporting mountains on each of the four sides around the base. These mountains are each 2000 yojanas wide and 10,000 yojanas high. Beyond these mountains there is a stretch of 5000 yojanas, and this makes up the 9000 yojanas from the Meru base.

The four supporting mountains are Mandara, Merumandara, Kumuda and Supārsva, in the four directions commencing from the east.



"Ground plan of Jambudvip.

"The Meru at the centre and the nine Varshas Illavrita (Middle) Bhadrasva (east) Ketumala (West) Ramyaka, Hiranmaya and Uttara Kuru (north); Harivarsha, Kimpurasha Varsha and Bharatha Varsha (South);

There are four gigantic trees on the four mountains - Cuta (mango), Jambu (rose apple tree), Plaksa (indian fig) and Nyagrodha (banyan) respectively. Each of these trees is 100 yojanas high and the spread of the branches is to the extent of 1100 yojanas. The fruits of the trees resemble mountain peaks.

The ripe jambū fruits of the tree upon Merumandara (south) drop down and the juice flows as the Jambū river. The juice spreading on its banks, when dried up, becomes the finest gold which is known as 'Jāmbūnada'. The divine beings, who visit this region, drink the juice and make different kinds of ornaments for themselves out of 'Jāmbūnada' (gold).

[Taking into account half of the Meru base and adding the width of the supporting mountain on any of the four sides, the total will be 10000 and there should remain another 7000 yojanas, not 5000, because the Ilavrta Khanda measures 34,000 yojanas from end to end. Perhaps, we have to allow a gap of 2000 yojanas between the Meru base and the supporting mountains (Kiladris).

We should, however, make provision for another round of mountains, not mentioned in this text. According to Srimad Bhagavatam, there are eight mountains, each 9000 yojanas long; and two of them

placed on each side. Since they are compared to the 'Kuśa' grass bundles put around the sacrifical altar, each of the two mountains should be in a continuous line, with some gap or no gap between them. Evidently their location is within the range of 5000 yojanas indicated above.

Srimad Bhagavatam is the authoritative text which tells us about Cosmography; and information gathered from any other source should be in accordance with it. That is what Ācārya Madhva says

"Yathā bhāgavatetu uktam bhauvanam koʻsa laksanam, Tasya avirodhato yojyam

anya granthantare sthitam"]

In this Varsa we find only the fair sex moving about day and night. No male person enters it for fear of Bhavānidevi's curse. If any one trespasses, he is transformed into female form like Ila, the son of Manu. The female attendants of Gauridevi are one hundred million ('arbuda') in number. Siva, along with Gauridevi, worships the form of Lord Samkarṣana, one of the 'caturmurtis' - Vāsudeva, Samkarṣana, Pradyumna and Aniruddha. Lord Samkarṣana is the SUN brightening the hearts of yogis.

This Ilavrta Varsa is bounded by four mountains on the four sides. On the eastern

side is the Gandhamādana mountain stretching between Nīla and Niṣadha mountains. It is 2000 yojanas in width. Of the same width, on the southern side, is the Niṣadha mountain. It stretches from the eastern ocean upto the western. (This refers to the Lavana Samudra around Jambūdvipa). On the western side is the Mālyavan mountain, lying between Nīla and Niṣadha even like the Gandhamādana. On the northern side of Ilavrta is the Nīla mountain, as wide and as long as Niṣadha. Siddhas inhabit these mountains.

BHADRÁSVA KHANDA

(183 - 193)

The eastern part of Jambudvipa is occupied by only one Varsa, the Bhadrasva. stretches upto the ocean on the east. Bhadrasravas, the son of Dharma, is there worshipping Lord Hayagriva; and he is the ruler of that Varsa. It is fully populated with his subjects. There are two other boundary mountains within the Khanda - Jatara and Devakūta, to the east of Gandhamadana. extend between Nila mountains Nisadha, each being 2000 yojanas wide and 18,000 yojanas long. Barring the space occuby the three mountain ranges Jatara and Devakuta) (Gandhamādana, Bhadrāśva Varsa measures 27 thousand yojanas from west to east. Although Bhadrasva is a single Varsa, the two extra mountain barriers mentioned, have been created by the Omnicient Lord to maintain symmetry on all the four sides. A similar arrangement is there in the western Varsa. With the two additional mountain ranges the Bhadrasva Khanda is divided into three stretches, each nine thousand yojanas in width. It should be thus construed because it is said in the texts that each of the nine Khandas of Jambudvipa is 9000 yojanas in width. Symmetry is thus maintained.

THE THREE SOUTHERN VARSAS

(193 - 208)

To the south of the mighty Niṣadha mountain lies the Hari Varṣa Khanda. It is 9000 yojanas wide. Here the great devotee, Prahlāda and the denizens of the Varṣa worship the Narasimha form of the Supreme Lord. The boundary mountain on the south is Hemakūta, 2000 yojanas wide and 10,000 yojanas high. (Its length is 10% less than that of Niṣadha. Therefore, it is 90,000 yojanas in length).

To the south is Kimpurusa Varsa, 9000 yojanas in width. It is bounded on its south by the Himavān mountain, similar to Hemakūta in breadth and height. The length is less by 10,000 yojanas (in round figures) on account



"Bharatavarsha with Bharatha Khanda at the edge"

of the circular shape of Jambudvipa and the ocean surrounding it. Along with the inhabitants of the Varsa, Hanuman (the greatest of devotees) worships Sri Ramacandra, Lord of sitadevi.

Then comes Bharata Varsa (to the south of the Himavān mountain), having the same width as that of the neighbouring Varsa. It stretches upto the ocean on the southern side. This is the Varsa that provides opportunities for human beings to earn merit.

On a peak of the Himavan mountain, the sacred 'Badarikasrama' is situated. Here, Narayana with Nara (Lord Nara-Narayana) is worshipped by expert yogis. Sage Narada and the seven rsis too worship Nara-Narayana, day after day. It is here too that the Lord in the form of Vedavyasa is served by Acarya Sri Madhva, the third 'avatara' of Sri Vayudeva. There are many other 'munis' following his example.

In between the boundary mountains, each of the three Varsas is 9000 yojanas in width. The same concept holds good in the cases of the three northern Varsas also. If it is not thus conceived, the measurement of 50,000 yojanas on every side from the Meru centre cannot be maintained. If the Ilavrta Varsa is taken to measure 34,000 yojanas, each of

the two varsas on its sides gets 27,000 yojanas allowing space for the boundary mountains. The same concept holds good in the cases of the three northern and the three southern varsas, each being 9000 yojanas wide and the boundary mountains occupying 2000 yojanas each.

$(9 \times 3 + 2 \times 3 = 33 \text{ thousand}).$

[The Himavan mountain referred to is the boundary mountain between Kimpurusa Varsa and Bharata Varsa -2000 vojanas wide, 10,000 vojanas high and 80,000 yojanas long. But, the Himālayā mountain with which we are familiar is only 50 yojanas (300 miles) wide, 1 yojana (5.5 miles) high, and 330 yojanas (2000 miles) Its location is in 'Dandakāranya' long. Khanda, which forms just a big lump at Bharata the edge of Bharata Varsa, which has a width of 9000 (60000 miles in round figures). The Badarikāsrama and the Kilas in our Himalaya are only mini prototypes. Then, when it is said that Acarya Sri Madhva flew off from Anu Badari to Maha Badari, means that he took a jump from our Himalaya to the bigger Himalaya covering a distance of 96,000 k.m. This is nothing to be marvelled at in the case of our Acarya who is the avatar of Vayudeva, who enters into every one of the activities of this universe.]

'Bharata Khanda-oblique directions of satellites.

KETUMĀLA VARSA

(208 - 213)

On the western part of Jambū dvipa there is only one varsa, the Ketumāla (resembling the Bhadrāsva on the east). This extends upto the sea on its west. Here, Lord Visnu is worshipped with the name 'Kāmadeva'. He is like crores of 'Manmathas' combined in one. (Manmatha and his spouse Ratidevi are well-known for beauty). Our Lord's beauty is par-excellence.

The life-span of man on earth is limited to 36,000 days and 36,000 nights. There are as many (72,000) daughters of Brahma, lording the life-courses of human beings. They serve Sri Ramādevi who worships her Lord Kāmadeva with 'mantras' of which she is the life spirit and the meanings of which she is fully aware.

Here too, as in Bhadrasva Varsa, there are two extra mountains in proper positions, maintaining the 9000 yojanas measure regarding the widths of the Varsas. Pavana and Pāriyatra are the two mountains. Lord Sri Hari has created them to make the island look symmetrically beautiful.

[The last sentence of the above Paragraph speaks of the artistic sense of Saint Sri Vādirāja; and it also pays a humble tribute to Sri Mahā Viṣṇu, the Artist of artists.]

THE THREE NORTHERN VARSAS

(214 - 224)

To the north of the Nila mountain is the Ramyaka Varsa. This is also 9000 yojanas in width. Here, Vaivasvata Manu and the sages of the Varsa worship Lord Sriman Narāyana in His 'Matsya' (fish) form. The boundary mountain on the north is 'Sveta'. It extends between the eastern and the western oceans; and its length is 1/10 less than that of the Nila mountain. Width is simialr.

To its north is the 'Hiranmaya Varsa' and its northern boundary is formed by 'Śringavān' mountain. It also extends between sea and sea and is comparable to the 'Śveta' mountain in this respect. But its length is 10% less than that of 'Śveta'. There are many Siddhas and rsis here. In this Varsa the Supreme Lord is worshipped in His Tortoise form (Kūrma) by Aryama, the chief among manes, and by the other inhabitants.

Beyond Hiranmaya Varsa is the Uttara Kuru Varsa, inhabited by divine beings and rsis. It extends upto the ocean on the north. With reference to its boundary mountain Sringavan, this Varsa also has an extent of 9000 yojanas. It is like its counter-part - Bharata Varsa on the south. Here, Lord Sri Narayana is always worshipped in His Yajna Varaha (Boar) form by Bhūdevi and the occupants of the Varsa.

Hari varsa and the other two to the south of Ilavrta varsa are similar to Ramyaka, Hiranmaya and Uttara kuru on the northern side. Each of these six varsa extends from occen to occen, lengthwise.

[When it is said of a few mountains that they are inhabited by Siddhas and rsis, it is indicative of the fact that all other mountain regions are similarly the abodes of sagely persons. In fact, there is not an inch of space in this universe which is not made use of for some purpose or the other. Every mountain, every valley, every river has its own presiding deity with assistants to provide amenities to the devotees of God.]

FOUR OTHER MINOR MOUNTAINS (224-227)

On the eastern side of Himādri there is another Kailāsa mountain where resides the

three-eyed god Siva, spouse of Umādevi. On the western side of Himavān there is the Karavīra mountain. In the same way there are two mountains on each side of Sṛṇgavān to the east and to the west. They are Tṛṣṛṇga and Makara. Here too there are siddhas and ṛṣis in large numbers. With these four mountains the Meru appears to be strong with four arms.

[Mention of Kailasa as a seperate mountain where Siva resides with Umadevi reminds us that Siva's abode is in several parts of the universe, discharging various functions to bless the beings and to earn merit for himself to a very high degree. He resisdes at the Kailasa peak of the Himalayas of Bharatadesa, at the Kailasa mountain right now mentioned, at the foot of the Meru mountain and Tapoloka above. We should know that he resides in all these places simultaneously and not frequently. Divine personage are capable of being at different places at the same time with their fractional spiritual parts, having the fullness of the original for all purposes.]

LAVANA SAMUDRA

(227-229)

The Jambūdvipa is vast containing as it does the nine varsas. Having the golden Meru mountain at its centre, it is the midmost island, with a diameter of one lakh yojanas. It is surrounded by the 'Lavana

Samudra'(Occan of brackish water), the width of which is also one lakh yojanas (six lakh miles in round figures.)

[Before proceeding further to learn about the other six islands surrounding Jambudvīpa, it is necessary to have a clear concept of Bharata Varşa and Bharata Khanda which form parts of that island. We know that Bharata Varşa is the southernmost division with the bigger Himālaya as its northern boundary and having a width of 9000 yojanas (55,000 miles).

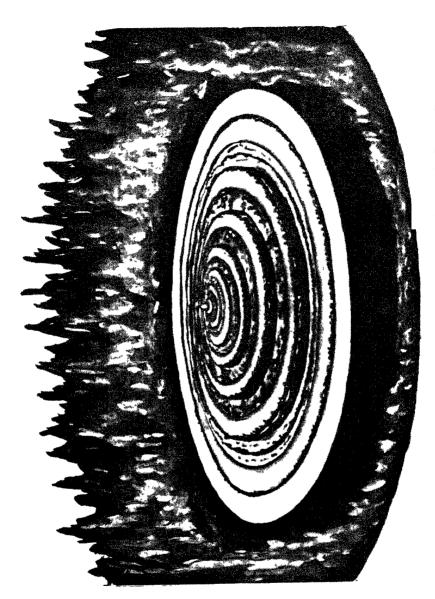
Jambudvipa should be considered as being basketlike in shape for obvious reasons. It has an altitude of one lakh yojanas. This statement may be supported by the following argument -

The island is circular. The orbits of the sun and the moon are almost in line with the Equator of Bharata Khanda, our globe. This is corroborated by the words of Srimad Bhagavatam which speaks of the sun's 'Udagayana' (northern course), 'Daksināyana' (southern course) and 'Vaisuvadayana' (course corresponding to the celestial equator). The orbit of Rahu is said to be 10,000 yojanas (60,000 miles) lower than that of the sun. Birds like garuda (white-breasted eagle) and swan and syena (hawk) are said to fly in regions still farther down below. All these are not possible if the entire earth, 30,0000000 miles wide, should be entirely flat. It must therefore have higher and lower parts, Jambūdvīpa being at the highest level. Our globe, Bharata Khanda, is perched

at the southern edge of the basket-like Jambūdvīpa. It is not a planet going round the sun. This concept is substantiated by the statement of one, Sri Anantharamu of Bangalore, who had joined the crew of the first Indian Antarctic expedition. He says that the south pole region projects downwards like a cone. He also says that this region has not been properly surveyed. Therefore it is indeed a flat lie to say that the south pole region is slightly flat like north pole region.]

THE OTHER SIX ISLANDS (230 -241)

Surrounding the Lavana Samudra there is the 'Plaksa' island (which is so called because it abounds with Plaksa trees - indian fig trees of gigantic size). It is double the width of the ocean of brackish waters (two lakh yojanas). Of similar width is the 'Iksu Samudra' (ocean of waters with the taste of sugarcane juice) around Plaksadvipa. It is populated by Siddhas (the highly qualified souls). Around it is the Salmala dvipa, lakh yojanas in width and the 'Surā Samudra' (of wine-like waters), of the same width, spreads around it. After that 'Kuśadvipa' (where Kuśa grass clusters grow very very tall like blazing pillars). It has double the width of 'Salmala dvipa'. It surrounded by 'Sarpi Samudra' (ocean waters with the qualities of ghee) having the



"Seven islands and seven oceans, surrounded by Loka-aloka Parvata",

same width. Then we have 'Krauncha dvipa' (which derives its name from the mountain of the same name). This island and the 'Dadhi Samudra' (with waters of yogurt quality) have double the widths of their inner complements. Each of these is 16 lakh yojanas wide. next is 'Saka dvipa' surrounded by 'Ksira Samudra', (ocean of milk-like waters), each 32 lakh yojanas in width. The last of the seven islands is 'Puşkara dvipa' (island of huge lotus flowers of gold), 64 lakh yojanas It is surrounded by the ocean of pure waters - 'Subhodaka Samudra' having the same width. The entire earth is surrounded by the land of gold - 'Hema bhumi', along with the adjoining land of diamond - 'Vajralepa'. Lokāloka mountain goes round the whole stretch of earth described so far. The limit of the earth is marked by this mountain ring. In this way the earth spreads round the Meru centre on all sides and it is there to provide all the needs of living beings including the divine class, the sages, the the sovereigns as well as human beings. This earth provides happy conditions to one and all. The presiding goddess, 'Bhūdevi' is most dear to Lord Sri Nārāyana. The earth is plentiful with all kinds of plant life and holy forests, crowded with the hermitages of 'munis' (sages). Rivers with holy waters are also there. Mother earth keeps the living beings happy and contented.

There are rich mines containing precious and useful metals and the rarest gems. It is for this reason that the earth gets its name 'Vasundharā'. She is indeed the mother of the world displaying proverbial quality of forbearance. Being seated on the lap of Lord Varāha, she looks quite pretty.

[Saint Sri Vadiraja has given a breif but precise description of the features of Brahmanda, not with a view to duplicate the details found elsewhere; but it is to say things without leaving room for doubts regarding locations, measurements and such other things. The way in which the text is prepared indicates that there must have been a good deal of confusion in the minds of the learned men of his days. He has removed misapprehensions in the clearest manner. In a concluding verse he himself says that it is so. "Vakyārtha kathana vyājāt bhūgolam iti varnitam".]

KĀLA CAKRA (THE TIME WHEEL) (242 - 256)

The limitless Time (Mahākāla) is rendered possible to be reckoned by the human beings since it is made countable as 'ghatika', day and night, 'Pakṣa' (fortnight), 'Māsa' (month), 'Rtu' (season) and 'Ayana' (course of six months) and, finally 'Varṣa' (year). The wonder-working Lord has formed this 'Kāla Cakra' in order to create facility for the courses of the nine planets, the Rāsis

(constellations of stars), the 'Taras' (stars), the seven sages (Saptarsis) and the divine, dazzling star-like vehicles Gandharvas. Siddhas and the merited human souls. The courses are located differently in space and the Lord holds them all in their courses at all times. The courses are all circular at different distances and altitudes, and they look quite brilliant with the lustre of rare gems. The courses are thousands and thousands of yojanas apart. The wheels of the 'Kala Cakra' are twelve nine for the nine Planets, one for 'Saptarsis', one for the stars and one the 'Rasis' (constellations). knowers of scriptures call this as 'Kala Since the 'Hemanta' and Cakra! seasons are considered together, 'Sisira' the Cakra is considered as having spokes; and, with reference to the twelve months, it is also said to be having twelve spokes.

Since the mechanism helps the counting of time divisions, it is known as 'Kāla Cakra'. The 'Vāmana sukta' speaks of 'Dvāda'sāra' and 'Pancāra' only for the said reason. This Kāla Cakra extends over crores of yojanas in the wide wide sky.

Above the Meru mountain, the Supreme Lord, in the form of 'Simsumara' (the scorpion

form) stands to a neight of 36 lakh yojanas, with his pretty face turned downward and his tail end held up to touch the 'Dhruva Mandala' (Pole star orbit). The body of this form is ringed in the middle and the tail part goes up. The brilliance of this form of Lord Simsumāra is much more than that of a thousand suns. It is He who makes the Time Wheel to go round and round as if it is a part of Himself. The main shaft-like powerline has its starting point atop the Meru mountain and extends outward to the extent of crores of yojanas.

[Although Time is an abstract concept, yet it is some thing. According to Grammar, whatever can be thought of and named is a thing; it need not necessarily be material by nature. As such, Time is something although it cannot be perceived by our external senses as material objects are perceived. thinkers say that it has no local standing except the relative sense of being taken into account as deciding the order of events as past, present and future. But, even as they themselves predict, the present universe will meet its end only to recreate That means that the order of events, parts itself. and wholes, continue to be and they have their pasts, presents and futures. Therefore, the sense of Time is If the concept of Time were not seperate from the events, we could only think of events and not of their sequence. Therefore eternality, in its abstract sense (apart from events), is undivided and

inconceivable; but yet, it is there. It is known as 'Mahā Kala'. This Maha Kala cannot be recognised as such by us; but, the Omnicient eternal Co-ordinator of all things knows it as some thing that is.

Even during the period of 'Maha Pralaya', when the present universe is consumed and another is yet to be created, the things to be created - causal matter and spritual entities, remain in the womb of 'Bala Krsna' lying upon the banyan leaf like an innocent child. Mukhya Prana, the would-be Brahma, carries on function of respiration in the spiritual bodies of the other souls, who are awaiting further courses of training for liberation. The process of respiration is by repeating 'Hamsa mantra',; not by means of physical When Mukhya Prana completes 21,600 repetitions of the mantra, it covers a duration equal to one human Thus Mukhya Prana too knows the day of 24 hours. passing of Time by the grace of the Supreme Lord - The The period of 'Maha Pralaya' is Co-ordinator of all. recognised as being equal to the life-span of a Brahma, which is known as 'Para' (864,0000000 x 360 x With reference to the 100 human years). Supreme Being, ParaBrahma, this 'Para' period is something like a night of 12 hours. When this night is nearing its end, when an hour and a half is still remaining, (12 1/2 years of Brahma's life-span), Sridevi, the eternal spouse of Lord Sri Narayana, assumes her 'Durga' form and praises the Lord with the hymns of 'Srutigita' entreating the Lord to begin the creation new world for the sake of the souls to released. Oh, how kind is that Mother of the universes!

During the period of creation, the same Maha Kala, running like a continuous stream, presents itself to be recognised in the form of the Time Wheel giving room for the movements of the planets and enabling human beings to take note of the passing of in its fractional parts like moments wholes like hours, days, months and years. see that Time is a seperate abstract something. flowing eternally like a stream, during the passage of which events occur. Therefore Time is not dependent on its relation to the occurence of events. In fact, in a way, every thing else depends upon Time; or, Time is almost synonymous with the Will of God. It is the Will of God that orders the events of the universe.

The grand-old-sire, Bhismacarya, pointed out at Sri Krsna sitting with the Pandavas before him as he himself lay resting upon the bed of arrows, and said to Dharmaraya, "the events of this world are all ordered by the Time factor and that is no other than the charming personality of Krsna sitting before us.

It is also interesting to note that 'Mukhya Prāna' and 'Garuda', born of him, are also in charge of 'Kāla' (Time) and they too go by the name 'Kāla'. There is yet another who goes by that name; and that is 'Yamadharma', god of death. He knows when to send for the living beings to have a tryst with him!

In the description of the Kāla Cakra given by Saint Sri Vādirāja we see that there are star-like devine vehicles distinct from the 27 star groups and

the constellations. They are said to be crores and in number and crores and crores of vojanas Certainly, our Saint did not use a modern apart. telescope, nor did he use electronic methods computing numbers and distances. Yet, here is truth about heavenly bodies. Vedic information correct. Modern findings, though approximating Vedic truth, are nevertheless faulty to a large extent. Suppose a star-like vehicle of a Gandharva king's servant is following the starlike vehicle of Master. The two being different in brilliance, how the scientist distinguish them precisely? can Evidently his calculations will be erroneous.

The mention of 'Dhruva mandala' suggests that the seemingly motionless Pole star has its own very small local orbit. The word 'Mandala' is suggestive.

Scientists do not know how the celestial bodies acquired their motions at unimaginable velocities. They simply call it 'constant velocity'. Why and how, they cannot tell.

But, as the wise Einstein has opined, there must be a universal coordinating spirit directing the events of this universe with their spatio-temporal relationships. Here is the actual description of the coordinating factor.

Lord Simsumāra, with head down and tail up, turns round and round like a gymnast right above the Meru axis and, projecting shaft-like power lines from His

body and with power lines from Pole Star Point, controls the movements of all celestial bodies. Lord Simsumāra gradually lifts the Kāla Cakra up during a period of six months and lowers it during the next six months making the Sun's chariot cross the Equator northward and southward, as also making the moon and the Rahu planet to keep pace with the sun. The seasons occur for this reason; and the earth need not go round the sun with inclined axis as the too clever Copernicus suggested.

Srīmad Bhāgavatam clearly points out how the Time Wheel is lifted and lowered when it speaks of 'Udagayana' (the northern course), 'Daksināyana' (the southern course) and 'Vaisuvadayana' (equatorial course). 'Viṣhuvad rekha' means the Equator. This also suggests that Bharata Khanda is indeed globular in shape.

The same V Canto of Srimad Bhagavatam tells us about the extensions of 'Candra mandala' and 'Rahu mandala' saying that the extension in the case of the Sun is 10,000 yojanas; and it is 12,000 (dvadasa), in the case of the moon and 13,000 (trayodasa) in the case of Rahu. Pandits misconstrued the 'dvadasa' and 'trayodasa'. Vijayadhvaja acarya, an authoritative commentator, following the verdict of Acarya Sri Madhva, has said that 'dvada'sa' 'dvidasa' - twice ten, i.e. twenty; and 'trayodasa' means 'tridasa' - thrice ten or thirty. Pandits also made the mistake of confusing the word 'mandala' to mer the orb instead of its orbit.

The correct interpretation is as follows - The extension of the sun's course is 5000 yojanas to the north of the celestial Equator and 5000 yojanas to the south of it. Hence the extension of 'Sūrya mandala' is said to be 10,000 yojanas. Similarly, to keep pace with the sun in the northern and the southern courses, the extension of the moon's course is 10,000 yojanas up and 10,000 yojanas down, and the extension of Rāhu's course is 15,000 north and 15,000 south. (Some say it is 20,000 and 20,000 - 'dviguna').

Apart from the annual northern and southern courses, the moon has also northern and southern courses every fortnight. This may be seen by any one by observing the moon's position in the sky night after night.]

THE MAIN WHEEL (DHĀRA) OF KĀLA CAKRA (257 - 265)

There is one horizontally placed wheel of gold (not the gross material gold with which we are familiar), located just above the Mānsottara mountain in Puṣkara dvīpa, the outermost of the seven islands. This wheel always goes round and round and it is meant to take the entire Kāla Cakra with it.

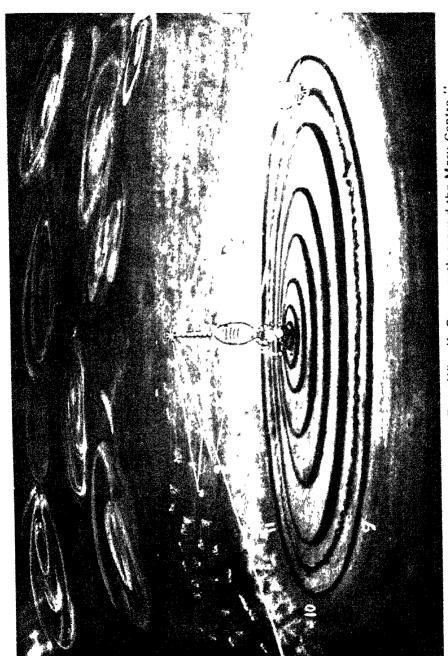
[Every heavenly body has its own wheel forming part of the Kāla Cakra to go round along with it, but with varying velocity. The entire Kāla Cakra may be

compared to an open umbrella with its apex at the Pole Star and its base at the main wheel.

Saint Sri Vādirāja refutes the arguments of the so called learned men of his days who maintained that the said main wheel was meant for the sun's movement only. He argues how it would be possible for one and the same wheel to go both slow and fast at the same time. Therefore, he says, that the sun's chariot has a wheel of its own apart from the main wheel of the Kāla Cakra which is meant to take the entire mechanism with it. Since it is studded with stars and star-like bodies, it is known as 'Jyotiścakra'. This wheel moves because Lord Simśumāra moves it.!

Our saint asks, "How can the horses running upon the main wheel, dragging the sun's chariot, also make the wheel to move with them? Also, how can we account for the slower movement of the sun's chariot as compared to the faster movement of the Time Wheel? In the world of mechanical devices we are familiar with two wheels — one horizontal and the other verticle upon it for two kinds of movements simultaneously. The same rule should be applied here also.

[Should we not marvel at the engineering knowledge displayed by our saint? It is from the Vedic store; not from modern scientific findings and appliances.]



"Kala Chakra -'The Time Wheel'- Sun s path around the Meru Centre."

The movement of the sun's chariot is similar to the movements of the other celestial chariots - those of the planets, the stars and the like. Every one of these chariots has its own circular golden path befitting it.]

THE SUN'S CHARIOT (266 - 295)

Upon the main wheel of the Kāla Cakra runs the sun's chariot drawn by seven horses. This chariot has only one wheel and its course upon the Kāla Cakra is right above the Mānsottara mountain ring. This is also of gold, brightening every direction with the brilliance of gems. The diameter of the circular course is many many yojanas and it is held dear by Lord Sri Hari.

The Kāla Cakra or Jyoti'scakra is comparable to a huge chariot; and it is motivated by Sri Hari in His Sim'sumāra form. Day after day it moves with great velocity, having the Meru mountain at the centre. This Kāla Cakra covers a distance of nine crore and fifty one lakh yojanas every day, taking the stars and planets along with it. The changes in seasons - cold, warm and hot, occur on account of this Jyoti'scakra. (This is due to the northern and the southern courses manipulated

by the lifting and lowering of the Time Wheel by the tail end of Lord 'Simsumara'. Because of the three seasonal changes effected, this Cakra is said to consist of three sections of its hub ('Trinābhi'). This Cakra wheel) itself is made to run without the need horses to draw it: hence it is called of 'Anarva' (Horseless). But, as it makes use seven modes of learning, it is also said be drawn by seven horses (This is in metaphorical sense); and the seven horses are also considered as one. The Cakra is said to drawn by seven horses or seven-in-one its fast motion because of resembling the gallop of But it should horses. be that this Cakra (main wheel) is remembered different from the sun's chariot which is indeed drawn by seven horses.

[This description shows evidently that Saint Sri Vadiraja is refuting the wrong view held by the other pandits who were confusing the Kala Cakra with sun's chariot. Another point to note is this is said that the main wheel of the Kala Cakra, which the sun's chariot runs, covers 9 crore 51 lakh yojanas in a day. It means that the circumference of the wheel is also 9,51,00000 yojanas. Therefore, its radius will be 9,50,00000 miles in round figures $(9,51,00000 \times 6.06 / (21/7) \times 1/2)$; and the distance between us and the sun is the same. Compare this with the modern astronomical figure, 9,30,00000 miles. it not something to wonder at?

Our saint anticipates objections and gives proper answers as can be seen in the following explanation.

The Kāla Cakra extends from the Meru centre to the mid part of the Mānasottara mountain and reaches right upto the Pole star above. The 'Svetadvipa Abode' of Lord Sri Nārāyana is located in the Milk ocean, within the bounds of the Cakra. The objection would be, 'How can the Cakra pass through the Abode of Svetadvipa without obstruction?' The answer is that just as the all-pervasive Viṣṇu (the proprietor of the sky and the sky itself, it being known as 'Viṣṇupada') does not obstruct the movements of the heavenly bodies, so also the Svetadvipa Abode stands as no obstruction.

GHATIKA AND MUHŪRTA (277 - 288)

The statement that day and night are equal to thirty, thirty means that they are equal to the periods of thirty 'ghatikas' each. In word-compounding in Sanskrit language there is what is known as 'Lupta madhyama samāsa' - missing the middle term in compounding the words. (Similar is the case in question. The missing word is to be understood from the context. Therefore, 'thirty' here means thrity ghatikas). A 'ghatika', then, will be equal to 24 minutes

(12 x 60 /30). The 'ghatika' concept is there to arrive at the concept of 'Muhūrta' which is recknoed for going through auspicious rituals (2 1/2 ghatikas = 1 Muhūrta. 24 x 2 1/2 = 60 minutes. Here we find the 24 hours-a-day concept). It is thus to be conceived cleverly, not simply clinging to the word meaning. This is the verdict of the Divine Lord Vedavyāsa.

This almost equal division of day and night of 30 ghatikas each is true only when the sun is in conjunction with the 'Tula' (Libra) and the 'Mesa' (Aries) constellations. These two months do not clearly witness the increase or decrease in the durations of day or night. During the months 'Tula' (Libra) and 'Mesa' (Aries), a day consists of 12 muhurtas; and twelve muhurtas make a night. When the sun's position goes on changing towards the upper five or the lower five constellations, the durations days and nights also vary. It is for this reason that Sri Suka Maharsi said in Srimad Bhagavatam that the twelve muhurta concept should not be applied to months other than 'Tula' (Libra) and 'Mesa' (Aries).

[For those in the northern hemisphere, duration of day time goes on increasing as the sun migrates northward from one 'rasi' to the other, commencing from 'Vṛṣabha' (Taurus); and the duration of nights

increases as the sun goes southward, commencing from 'Vṛścika' (Scorpio).

Here we have the clearest indication to say that our ancients knew our part of the earth to be a globe; and that was unlike the Greeks of Ptotemy's time who considered it to be flat and round like a rupee coin. However they were not entirely wrong because the wide wide earth upto the sweet-water ocean 'Suddhodaka Samudra' - a stretch of 30 crore miles, is certainly round like a rupee coin although not fully flat. Greeks and the other learned men of the Middle East had forgotten all about this wide invisible expanse of the earth and they mistook our part of the globular earth to be flat. Why, for that matter, even most of the oriental pandits of our own times have such wrong They must revise their opinions by learning How this should be done, I to read between lines. will illustrate with two examples.

- (1) Jambūdvipa should be considered as being basketlike in shape because, it is said that the sun, the moon and the stars do not shed their lights in the Ilavrta Varsa, the middle most region.
- (2) The moon's chariot should be located not too far from our globe as in the case of the sun just because it is said that its course is one lakh yojanas above that of sun. Srīmad Bhāgavatam clearly states that the moon's chariot is above the rays of the sun, not above the sun.

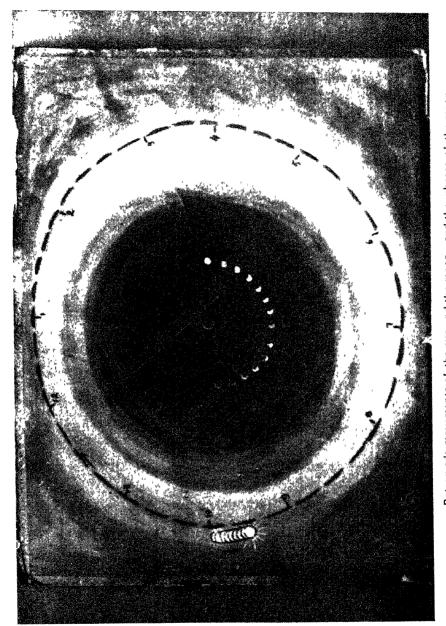
But our pandits miss the meaning of the words 'arka gabhastibhyah uparistat', meaning, above the rays of the sun.]

MOVEMENTS OF THE PLANETS

(288 - 294)

The Sun's chariot covers a distance of 34,00800 yojanas in a muhurta, this being its velocity day after day. In this way, the total distance covered will be 8,16,20000 yojanas (to the nearest thousand).

[However, this still falls short of the distance covered by the supporting wheel of the Kala Cakra, which is 9,51,00,000 yojanas. This falls short by 1,33,80,000 yojanas. But the position of the sun with reference to the constellations will be just 1 degree The Kala Cakra will have gone 1 degree further than its starting point along with constellations when the sun reaches the starting point in 24 hours. This is like a person walking forth in a moving train, in the the same direction, from the last carriage upto the first one near the engine. say he will have covered 1000 feet by walking. actually, he will have covered the distance travelled by the train plus the distance covered by If he were just sitting in the last carriage, he would have covered only, say, five miles when the train had covered that distance and stopped. But, in the said instance, he will have covered five miles, plus 1000 feet.]



Retrograde movements of the sun and the moon, and the phases of the moon.

This is what Sri Suka Maharsi has said about the lagging of the sun's chariot. Hence there is no contradiction involved in his statement.

The sun's chariot, along with 'Aruna' and the seven horses, is at an altitude of one lakh yojanas above the earth. Moving slower than the Kāla Cakra, the sun touches the constellations behind, gradually, one after the other. The constellations move faster, almost with the same velocity as that of the Kāla Cakra. They too lag to a slight extent, but the sun's lagging is perceivably more. This is known as 'Vāmagati' (retrograde motion). The sun takes one month to cover each constellation by the retrogression, as it were.

THE OTHER PLANETS

(295 - 309)

The moon's motion being much slower than that of the sun, it remains far behind the sun every day; and by its quick retrogression every constellation is covered just in 2 1/2 days. The velocity of the moon's chariot, therefore, exceeds that of the sun so far as retrograde motion is concerned.

'Guru' (Jupiter) takes one year to cross each constellation by retrogression. Similarly, 'Sani' (Saturn) takes two years to touch each successive constellation behind. Its velocity being slower than that of the other six planets, the name 'Sanaiscara' (slow-mover) is appropriate.

In this way, the movements of the planets are said to be in the backward direction. (But, that is with reference to the constellations). This backward movement resembles that of an ant going round upon an oil machine wheel in the same direction. During every round it finds itself more and more backward with reference to the hub at the centre. (The fact to be noted is that the ant does not move backward; but it only falls behind; and this is like going backward with reference to a companion starting at the same point as another, but out-stripping the latter and making that other to fall behind).

If all the planets really move in the backward direction, at sunrise we can see the back of the Sun god instead of his front; and how then is it possible to offer him 'arghya' (water to wash his hands)? Therefore, the movements of the planets must be understood only as explained by us. It is in agreement with what is said in Srimad Bhāgavatam, stating that the Sun keeps the Meru mountain

both to his right and to his left as he moves upon the Kāla Cakra in the same direction. We should also know that the deities of the planets do not misbehave by circumambulating Lord Simsumāra in the wrong direction. They do certainly go one full round along with the Kala Cakra every day, keeping the Lord (and the Meru below) to their right. They also fall behind with reference to the Kāla Cakra itself on account of their lagging; and this is as if they are keeping the Lord to their left.

A thick shaft of gold, projecting from the Pole star point, holds the mechanism of the Kāla Cakra in position without allowing it to drop down upon the earth.

The deities in charge of the constellations, who determine the 'ghatikas', have greater velocities while moving upon the Time Wheel; but the planets are prone to fall behind.

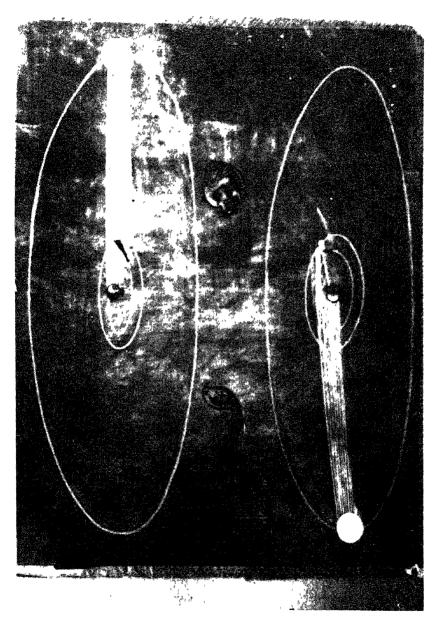
PLANETS RĂHU AND KETU (309 - 320)

The Rāhumandala (the route of Rāhu's circuit) is situated upon the lowest wheel of the Kāla Cakra, at an altitude of 90,000 yojanas above the earth (10,000 yojanas below the level of the sun's path). The planet Ketu, with a hundred tail-like projections,

is also at the same spot (It is as if the two planets are twins whose bodies are joined together, back-to-back). The glorious Lord cut off the head of the demon Rāhu (as also the head of Ketu) when he attempted to share stealthily at the time nectar 'Amrtamanthan'. The heads of the two demons have occupied the status of planets having just tasted a few drops of nectar. They are there only to torment the sun and the moon. However, their spiritual presence in planets is negligible. The oblations offered Rāhu and Ketu are accepted by divine presences dwelling in those two planets; and Lord Himself accepts the offerings through those divine presences and blesses the worshippers.

The Sun's route lies on a different wheel of the Kāla Cakra, one lakh yojanas above the earth. He is there to bless the world with his bright auspicious rays. On another wheel, one lakh yojanas still higher, the moon moves upon its own path.

On the occasions of eclipses, the sun and the moon face each other, moving as they do on their own paths. On the new-moon day they are towards the same constellation; and on full-moon days too, they face each other being exactly towards opposite constellations. If Rāhu also takes position at similar



"Solar and lunar actipses, Sun's rays or moon's rays cut off by the black jet proceeding from Rahu"

longitudes, then an eclipse takes place. What is known as 'Pancagraha yoga', also happens under similar conditions (Five planets ranged towards a common constellation).

[Rāhu is a black planet below the level of our part of the earth. Ketu is dark-brown in colour. Their path is 10,000 yojanas lower than the path of the sun; not exactly down below the sun. Similarly the, moon is one lakh yojanas higher; but not right above the sun. According to the Puranas, the moon's path lies above the 'Lavana Samudra' surrounding It is thus to be construed because it is Jambūdvīpa. said that there is an island called 'Candradvipa', within the area covered by the moon's orbit, 4000 yojanas away from Jambudvipa and that it is 1000 yojanas wide. It is also said that the Ganga waters coming down from the cleft in Brahmanda, washing the uplifted left foot of Lord Trivikrama, reached the several upper worlds and ultimately touched the top of the Meru mountain; and as it did so, it covered the 'Candra mandala', which extends downward from the breast of Lord Simsumara and covers the area enclosed by the moon's orbit. This would be possible only if the moon's orbit were somewhere above the 'Lavana Samudra' and not at all if it were right above the sun's path.

Since Rāhu and Ketu pester the moon also by cutting off the moon's rays coming to us, their planet should be nearer to our earth than the moon.

We may thus note how the Puranas have located the Sun and the Moon at distances of 9,30,00000 miles and 2,50,000 miles away from our globe respectively. Just because some learned men misinterpret things, we should not try to find fault with the Puranas without proper understanding. For instance, the greatest oriental religious adventurer, Srila Prabhupada, the sponsor of the 'Hare Krsna' movement, has said that it is not possible to believe that astronauts landed upon the Moon because that planet is crores of yojanas away being located one lakh yojanas above the sun. He has also said that the astronauts must have reached only a nearer planet like Rahu. This is against the version of the Puranas as well as against the modern findings by geometrical method.

It is strange that the staunch followers of religious teachers believe implicitly whatever those teachers say without using discretion. Although all scientific guesses may not be correct as in the case of stellar distances, we should attempt to harmonise rational findings with puranic faces. For example, the distance between our earth and the sun is said to be 950 lakh miles (approximately) both in the puranas and in our geography texts.

Coming to the occurance of eclipses, we have to disagree entirely with the views of modern astronomers. Rāhu and Ketu are the slowest in motion taking about 18 years to cover each constellation by retrogression while moving also forward along with the Time Wheel. Therefore, they often meet the sun or the moon

at the same longitudes. They are not merely nodes or crossing points of the paths of the sun and the moon. The planet of Rāhu and Ketu is actually there. Modern astronomers have not turned their telescopes towards that planet; or perhaps, it is not recognisable, being dark in colour.

To say that the earth covers the moon or that the moon covers the sun during eclipses, is but a convenient guess. The three planets are never in the same straight line. If this argument is put forth, the scientists readily take shelter under parallax effect. But that is no excuse.

The fact is different. The planets being at different altitudes, there is no question of their coming together in a straight line, Rāhu, when at the same longitudes, sends out a black jet and cuts off the rays of the sun or the moon as the case may be. This is known as 'Grāsa' or swallowing. If it is the turn of Ketu, he sends up dark brown rays and consumes the rays of the sun or the moon. Any one can verify this statement during lunar eclipses, finding black or dark brown shadow upon the moon's orb - black when it is the turn of Rāhu and brown when it is the turn of Ketu. Actually, there will be no shadow upon the sun or the moon. To us it looks like that since the rays are cut off from our view partially or fully.]

$\frac{\text{THE STAR WORLD}}{(320 - 345)}$

Above the moon's orbit, the star world extends upto 30 lakh yojanas. In the middle areas the merited souls - Gandharvas Siddha class of divine personalities, along with their consorts, enjoy life, moving as they do in their divine vehicles. They eat nice food, drink sweet juices and they sing They drink the sweet waters of and dance. the Ganga pervading in the sky (Akasa Ganga). Their vehicles are crores and crores in number and they are in the forms of stars. (They are stars of their own kind). Even now Because of the brilliance of can see them. these star-like vehicles and of the stars and planets, the Time Wheel is called as 'Jyotiścakra' - the 'Wheel of Light'.

The location of the constellations is in between the moon and the stars (the 27 star groups).

The planet Sukra (Venus) is two lakh yojanas higher than the stars. Budha (Mercury) is two lakh still higher; Kuja (Mars), another two lakh higher is Brhaspati (Jupiter), the divine priest. Two lakh yojanas above Jupiter is Sanaiscara (Saturn). The

'Saptarsi mandala' (great bear) is 11 lakh yojanas above Saturn; and 'Dhruvamandala' (Pole star) is 14 lakh yojanas above the orbit of the Saptarsis. Thus, the Pole star is at at an altitude of 37 lakh yojanas above the earth.

[Here we are certainly at loggerheads with modern scientists and astronomers, who say that the nearest star 'Alpha' is at least 4 light years away and that the Pole star is still farther away. Having seen how Vedic information is fully correct, we should not be afraid of finding fault with human calculations. There must be something wrong somewhere with their instruments or their mode of calculation. The Pole star is only 2,22,00000 miles away from us, and not more than 200000000000000 miles away. Just as are star-like divine vehicles below the Pole there are also divine vehicles of greater brilliance and velocities at higher altitudes near the worlds, moving in different directions. Perhaps, these are mistaken as Pulsars and Quasars Galaxies. 1

As the planets go along their courses, Gandharvas and Apsaras sing and dance and go with them in front. They make themselves merry again and again with sweet scents, flowers, delicious food and nice drinks. The learned brahmins on earth chant hymns in their praise and offer oblations and salutations. These divine beings bless the good

souls with auspicious things and curse the bad ones with disastrous effects.

[Here is the truth about the satellites or moons of the planets.]

Thus the glory of the Kala Cakra has been described.

The Puskara dvipa surrounds the Milk ocean (Kṣirābdhi). In its middle part runs the Mānasottara mountain ring brightening all directions. In between the opposite sides of this mountain ring, the distance is 2 crore, 51 lakh yojanas. The Kala Cakra extends thus far.

Some say, out of ignorance, that the sun sinks into the western ocean and enters the Nether worlds and then rises in the east. This is against Vedic information. It should not be accepted. On account of the terraced formation of the seven islands, Puskara dvipa is the lowest; and therefore the setting point and the rising point of the sun are at lower levels in comparision with the location of our part of the earth. Hence it looks as though the Käla Cakra goes down and comes up.

[Here we see how Saint Sri Vādirāja criticises the wrong views held by the ignorant ones, who said that the earth is round like a rupee coin, surrounded by a

deep ocean. This is how the early Greeks and the Europeans of the medival period thought. Indians were no exception, influenced as they were by the Greeks after Alexander's invasion of India. To be truthful, all this is due to the curse of Sage Gautama and the onset of the Kali Age. Sage Gautama cursed the thankless sages that their knowledge should be dimmed.

It is sad to note that the great \overline{A} ryabhata unwittingly accepted the Heliocentric theory proposed by the later Greeks.]

In Mahābhārata it is said that there is another Time Wheel in Pātāla loka upon which move another sun and another moon. The denizens of that region swoon down during day time on account of the hot rays of the sun and are revived when the cool rays of the moon strike them. This Time Wheel also is said to be lifted and lowered. The ignorant ones have confused this Time Wheel for the Kāla Cakra of the 'Antarikṣa' above the earth. This is like mistaking a rope for the snake.

We should believe only in the words of Sage Vedavyāsa who is none other than Lord Sri Nārāyana. That the terrestrial Kāla Cakra goes round and round circumambulating the Meru mountain, can be understood by

observing the 'Saptarsi Mandala' which goes round the polar axis, as every one can see.

THE ENVELOPES COVERING BRAHMANDA (345-348)

The Brahmanda (the golden shell covering the universe) is 100 crore yojanas thick. is surrounded by the watery envelope which a thickness of 1000 crore yojanas (Arbuda). Around it is the envelope of the fire element with a thickness of 'Nirbuda' yojanas (10,000 crore) . Similarly, there are other seven envelopes, each ten times thicker than its inner complement. They are - Air element, 'Kharva' (100,000 crore); Sky element, 'Maha Kharva' (1000,000 crore); Ego 'Padma' vojanas element (Ahamkara), (10,000,000 crore), Mahat tatva element (principle of intellect), 'Mahā Padma' (100,000,000 crore); Tamoguna (principle of ignorance), 1000,000,000 crore - 'Ksoni'; Rajoguna (principle activity), of 10,000,000,000 crore - 'Mahā Ksoni'; and Satvaguna (principle of light and knowledge), 100,000,000,000 crore yojanas - 'Sankha'. But the extent of the universe within the Brahmanda is only 50 crore yojanas.

[Here we should recollect what has already been said (St. 152). The huge Brahmānda, with its nine envelopes, is not big enough to fill a hair pit on the body of Lord Nārāyana. By this we should understand

that every thing has a limit; but our Lord is limitless. He is the limit for every thing. There is no question of what is beyond, although with our material-mindedness we are sure to pose such a question.]

CONSUMATION OF THE UNIVERSE (348 - 358)

As the 'Sruti' declares, "Yasya bramhaca Ksatranca ubhe bhavati odanam", the living of the four castes, the great sovereigns, ordinary human beings and the other creatures as well as divine beings, demons, serpents, yaksas, gandharvas, acquatic creatures, pisacas in crores - all, all are sanctified by the ghee of their bodies and are consumed by the Lord at the time of dissolution. He has a variety of drinks in the oceans. Vegetation and fruits of diffekinds form the herbal medical stuff. rent are cooked in the fires of All these 'Pralaya' and the Lord Himself is the cook. Having consumed everything, he mixes the ashes of the golden Brahmanda into the surrounding water envelope and drinks it up like a digestive potion. He then rests upon the banyan leaf like an innocent child. tasting the thumb of his lotus-foot, inserted into his lotus-mouth, the foot being held by his lotus-hand.

"Karāravindena padāravindam mukhāravinde vinivesayantam,

Vatasya patrasya pute 'sayanam bālam mukundam manasā smarami."

[Here is a description of the 'Laya' process, taking back the created things to their original state, step by step. The concept of the Lord swallowing everything does not mean that He is hungry and thirsty. He is not at all affected in any manner by the process of creation or dissolution. He is praised in the 'Purusa sukta' thus - "Sāsane anasane abhīh". He creates and sustains so that the dependent selves may qualify themselves for their final goals; and, when he goes on with the work of dissolutin, he gathers up the merits and demerits earned by the souls to reward or to punish them, and he also converts the created material world into its original state of 'Avyakta', the unmanifest 'Prakṛti'.]

'SAMARPANA' (DEDICATION) (358 - 361)

Thus, a description of the universe has been offered that the Lord may be pleased with this act. This is authored by Vadiraja Bhiksu, the devotee of Acarya Sri Madhva. Let the gods find pleasure in going through it. The writing of the text was occasioned by the debate regarding certain details about the universe.

My salutations to Lord Laksmipati who is the resort of the yogis; and my salutations to Ācārya Sri Madhva, who knows the Sastras perfectly.

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Sri Kṛṣṇārpanam astu

ANNEXURE - 1

What Scientists say about the Theory of Evolution

The traditional view of evolution is that living things change gradually over millions of years. But the fossil record always shows abrupt changes; new groups of organisms replace old ones with no evidence of transitory forms.

'Missing links' was the phrase conveniently used. It is as though new groups evolve in isolation, then rapidly spread and completely replace the old ones.

The meteorite theory is put forward for extinction of species on a large scale. The volcanic theory is being advanced now.

Regarding the meteorite it is said - The sun's companion star, with elongated orbits, comes nearer and upsets the cloud of comets which bombards the earth. This occurs every 26 million years.

"It is a nice theory, but not all geologists and astronomers accept it." [Compare - The Puranas declare that catastrophies occur every 30 million years. This is known

as 'Manu Kalpa Pralaya' = 71 maha yugas (4320000×71 years)].

"Yet the problem remains of seeing how one group of organisms changes into another."

"We could therefore hardly expect to detect gradual changes into another." (Quotations from Edward Ashpole's article, Deccan Herald, Sept. 2, 1984).

- F.J. Noronha (Deccan Herald, Sept. 30, 1984) refutes Edward Ashpole's views, saying, that the latter's statements show contradiction when he says,
 - (i) "But the fossil record does exist. That is the important point. Evolution has certainly taken place." - As against this.
- (ii) "But the fossil record always shows abrupt changes. New groups of organisms replace old ones with no evidence of transitory forms."
- F.J.Noronha continues "Ever since Darwin published 'Descent of Man' in 1871, it has been the pet theory of evolutionists that man has descended directly from the ape by mere chance. The idea sparked off a worldwide search for missing links. Many of the

'Discoveries' proved to be frauds. The most famous was Piltdown Man installed in the British Museum in 1912, and exhibitted as irrefutable proof of evolution. Investigation revealed that the skull of an ancient human was attached to the jaw of a freshly killed monkey and that the famous tooth had been painted to lend antiquity. Such aberration from scientific integrity must cast serious doubts on the authenticity of fossil records."

[Fossil records there are; and they do point out the stages of creation by the agents of God as been pointed out in the introduction. Mere human quess leads one no where. For example scientists hold the opinion that the iceland of Antarctica was once a greenland. But it is strange that they overlook the phenomena of the movements of the earth's crust during periods of 'catastrophe'. They only think of meteors and volcanoes. But our Puranas tell about the upsurge of the ocean and consequent disturbances during 'Manu Kalpa Pralayas'. The fault is not that of the modern scientists who blindly follow the revolutionist Renaissance thinkers, who were not satisfied with the views of the religious magnates of their times. But if only they had access to our Puranas in those days, things would have been quite different.]

Albert Einstein - (based on Abraham Pais' Biography of Einstein - article by Rajendra Prasad, Deccan Herald, 25.3.1984). There is

a remark about Einstein's "unceasing quest for harmony in natural and social phenomena."

[This is certainly a pointer signifying the need of an omnicient, omnipresent, omnipotent Supreme Being. The very first stanza of Srimad Bhagavatam speaks of such a Being who is responsible for 'harmony' since He is in the right know of things - "Arthesu abhijnah, swarat" (He, the source of all knowledge, knows what things and spiritual beings are and He is independent Master)].

Einstein has said, "The basis of all scientific work is the conviction that the world is an ordered and comprehensible entity."

Regarding the scope of scientific research he says, "But I do not doubt that the day will come when the description too (his own theory of relativity) will have to yield to another one, for reasons which at present we do not yet surmise. I believe that the process of deepening the theory has no limits".

"Science without religion is lame; religion without science is blind."

"Truth, independent of man, independent of consciousness, independent of sense

experience, independent of morality " - this was Einstein's religion.

[Is this not like Brahman, free from material attributes!]

Talking of the deep and wonderful experience of the mysteriousness of the cosmic structure, he said, "I content myself with making amazing conjectures about these secrets and humbly try to create a far-fromfull mental picture of the perfect structure."

"Need to believe always provides greater impetus for the need to know."

Fraud in Science

(C.S.G.Prasad, Deccan Herald, Aug. 14, 1983)

"The famous case of the Piltdown man, surely the most celebrated hoax of all time in science"

Why does fraud occur at all in scientific fields? There are many reasons why. There is firstly the culture of "publish or perish". 'Massive cooking up of results' is there.

There is enormous competition in the world of science - to get ahead of his or her

peers. There is temptation to 'fabricate results'.

Some times perfectly respectable studies are labelled as frauds because established science does not like the implications of this or that particular study.

[This is what has happened to puranic truths in our country.]

Competition and preconceived notions, then, are the two most important reasons behind fraud in science.

We still do not know how many undetected frauds continue to adulterate science; there is no way of knowing either. Given this dismal prospect, how can we continue to believe in scientific truths?

[Nature of stars and stellar distances belong to this field of scientific truths, largely conjectures, not established truths.]

Photograph of the Earth

A photograph of the globe earth was published in 'Kannada Prabha' as the complete picture of the earth (28.9.83).

I doubt if it is a true photograph or a 'cooked up' picture of the artists' skill.

How could one obtain a full photograph of the entire earth 8000 miles in diameter, from a distance (height of 600 mi , is indeed surprising.

The clear contours of the continents therein certainly point out to artistic fraud.

ANNEXURE - 2

Sūrya Siddhānta

(Astronomy based on Helio-centric theory)

If we look into the 'Bhūgola Adhyaya' (P. 245) of 'Sūrya Siddhānta'; which is in the form of a dialogue between the Sun God and Mayasura, (Kāśi Sanskrit Granthamāla - 144). any discerning person will easily find out that the meanings of the original texts are perverted to make out preconceived meanings. The twisting of meanings could not be done while translating the original verses; but the perverted meanings are given latter half of the chapter, stating clearly, "It is the opinion of all the thinkers that all the planets go round the earth; but the new thinkers are of opinion that the sun is steady and the planets, including the earth, go round the sun (P. 225).

The very text of 'Sūrya Siddhānta' seems to be a mixture of sensible puranic verses and inserted new ones to press forward modern views.

Moreover, 'Surya Siddhanta' is meant to delude the demoniac minds of 'Kaliyuga',

those who follow Mayasura, the architect of the demons.

In this context, it may be noted that the 'Māya Civilisation' reminds us of Mayāsura and his brood, who only could have created marvellous artistic and engineering models, beyond the ability of ordinary human beings, referred to in "Chariots of the Gods".

ANNEXURE - 3

(Miscellaneous)

Two Indian mathematicians working in a Siberian University, Dr. Paul Gulati and his wife Shobha Gulati, authors of 'Similarity Theory', say that Einstein was wrong. They say, "In this theory, light velocity is not held as constant (as Einstein did) and there is no clock paradox which follows from Einstein's theory".

Fifth Force in Nature

"When you see something as fundamental as a new force it is likely to change many things. We will have to rethink many views of Particle Physics and Cosmology".

(Sunday Herald, Bangalore, 26.1.86)

Chinese links with Vedas

Prof Huang Xinchuang ponders whether the Vedas sustained the Chinese dynasties. The Chief Editor of the 'Chinese Encyclopedia' now being compiled, Prof. Huang told visiting researchers of the Institute of Oriental Study from Thane, near Bombay, recently, that "virtually every Chinese dynasty got the Vedas translated from Sanskrit to classical Chinese". Manuscripts on Yoga and Ayurveda,

including Pātanjali's "Yoga Sūtra and the "Sushruta" and "Charaka" Samhitas were similarly translated, the professor said and claimed that over 5000 such manuscripts are available in China, several of them predating manuscripts extant in India.

(Deccan Herald - Saturday, Aug. 23, 1986)

Sri M.B.K. Sharma, Astronomer, Usmania University, says, "The moon is too large to be regarded as a true satellite".

ANNEXURE - 4

Process of Creation

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'Avyakta Prakrti' - Latent original matter consis-
                                      ting of only pure 'Satva' and pure 'Tama' at rest in
                                                                                                                                                         Disturbed by God's will at the outset of creation.
                                                                                                                                                                                                                                                                                                                                                                                                                                              'Tama', principle of darkness, ignorance and misery
                                                                                                                                                                                                                                                                                                                    'Satva', principle of light, intelligence and joy
                                                                                                                                                                                                                                              (Ksobha or Disturbance = Physical mixture)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             'Sabala' - multi-coloured principle
                                                                                                                                                                                                                                                                                                                                                                        acts upon
                                                                                           God's womb.
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(3) Tama (bluish)

(2) Raja (reddish)

(1) Satva (yellowish)

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Some A.T.+ less Satva +
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Tanmatras'
                                                                                                                                                                                                                                                                      some Raja + more Tama
                                                                                                                                                                                                                                                                                          'Tamasa Ahamkara'
                                                                                                                                                                                                                                                                                                              (Siva proper)
                                                                                                                                                                                                                                                                                                                                                                                                                     of motor organs
                                                                                                                                                                                                                                                                                                                                                                                               Five abilities
'Mahat Tatva' - principle of intellect, partly used for
                                                                                 Mahat Tatva + Some Satva + Some Raja + Less Tama
                   the body of Caturmukha Brahma, apparent Creator.
                                                                                                                                                                                                                                                Some A.T+ some Satva+
                                                                                                                                                                                                                                                                    more Raja + some Tama
                                                                                                                                                                                                                                                                                       'Taijasa Ahamkara'
                                                                                                                                           (Body of 'Siva')
                                                                                                                      Ahamkara Tatva
                                                                                                                                                                                                                                                                                                            (Brahma in 'Siva)
                                                                                                                                                                                                                                                                                                                                                                                                                   of sense organs
                                                                                                                                                                                                                                                                                                                                                                                              Five abilities
                                          (Vişņu in Brahma)
                                                                                                                                                                                                                                                                                                                                                                                                                                                          the core of
                                                                                                                                                                                                                                                                                                                                                                                                                                      located in
                                                                                                                                                                                                                                                                                                                                                                                             Subtle Mind
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                the spinal
                                                                                                                                                                                                                                               Some A.T.+ some Satva+
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   chord.)
                                                                                                                                                                                                                                                                                                                                                                                                                  (To be
                                                                                                                                                                                                                                                                    some Raja + less Tama
                                                                                                                                                                                                                                                                                       Vaikārika Ahamkāra'
                                                                                                                                                                                                                                                                                                            (Visnu in Siva)
                                                                                                                                                                                                                                                                                                                                                                                                                  divine beings
                                                                                                                                                                                                                                                                                                                                                                                                                                       (very very
                                                                                                                                                                                                                                                                                                                                                                                             Bodies of
                                                                                                                                                                                                                                                                                                                                                                                                                                                           subtle)
                                                                                                                                                                                                                                             134 '
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Tanmātras' 	 5) Principle of Smell (Gandha Tanmātra)
	4) Principle of Taste (Rasa Tanmātra)
;	3) Principle of Sight (Tejas Tanmátra)
	2) Principle of Touch (Vayu Tanmātra)
	brinciple 2) Sebana (Saba

ANNEXURE - 5

Pancikarana

(Creation of gross matter by 'Albdana' or Chemical combination)

Inside the shell of Brahmanda, purest gold, 'Gandha Tanmatra' principle, concretised.

Contents of Brahmanda

(five subtle material principles, the 'Tanmatras' dissolved in the watery principle entering into Brahmanda).

Watery principle concretised as hardened water (Ghanodaka or Garbhodaka) to fill the lower half of the hollow Shell. The upper half

remaining as Subtle Sky).

Formation of gross matter (Pancikarana)

ø	ent	1 1	= Material Sky	
Gross	eleme		Materi	= Air
			H	Ħ
Smell	Principle	***	20	20
			+	+
Taste	Principle		20	20
			+	+
Sight	Principle		20	20
			+	+
	Te	i		v
Touch	Principle	1	20 +	120 +
			+	+
Sound	Principle		120	20

	element		= Fire	≖ Water	= Earth
Smel1	Principle		20	20	120
			+	+	+
Taste	Principle	# # # # # # # # # # # # # # # # # # #	20	120	20
			+	+	+
Sight	Principle		120	20	20
			+	+	+
Touch	Principle		20	20	20
		_	+	+	+
Sound	Principle		20	20	20

the middle part of the surface of the hardened subtle The formation of earth, 48 crore k.m. in Rarth = Formation of mineral salts, etc., settling down to occupy diameter, in ecologistic and artistic manner - the hand of waters.

All this is Vedic information, not scientific guess.

ANNEXURE - 6

Final Verdict

The theory of evolution was the product of European Renaissance. The intelligentia of the west probed into the past of Greece, Egypt and China, to some extent, the last two grudgingly. They never cared to look into the past of India, perhaps, due to the prejudicial feeling created by British domination.

A study of Vedic literature on oriental lines will show much internal evidence to say that the Vedas are Revelations; not just the cream of human thought.

When we familiarly come across astounding inspiration and intuition, is it not right to respect the intuition of the great seers? Ramanujam, the mathematical prodigy, once said to his peers in England that his family deity, Nāmagiriyamma gave in his dream the solution for a difficult problem that was worrying the heads of every one of them.

As regards Cosmogony and Cosmography, the western scholars gathered only hazy and distorted notions from later Greece and its successor Rome.

It is for the wise ones to dig deep into the oriental mines.

BRAHMANDA WITE TEELINGE



AND THE NINE ENVELOPES
Not to Scale.